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"Be a person, be a brand"

Cliff Bleszinski explains how games developers can find fame in the 21st Century

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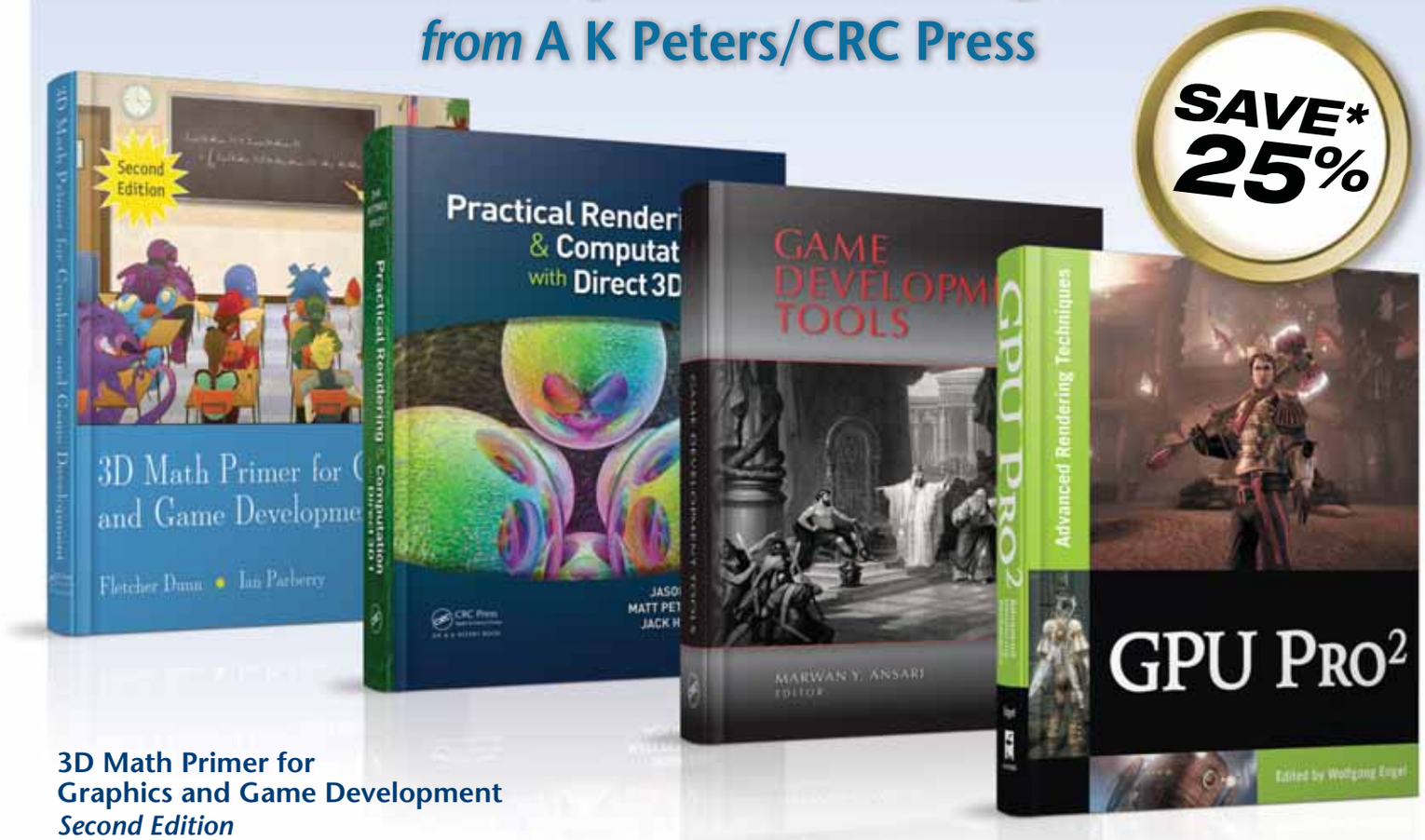

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ADVENTURES IN GAMES DEVELOPMENT: NEWS, VIEWS & MORE

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Cage: No games tax breaks and I'll quit for Canada

Government support gave Quantic Dream a commercial a edge it might not otherwise have been able to afford

by Rob Crossley

GAMES DEVELOPMENT visionary David Cage has said he would be working in Canada if France ever dropped its games tax break policy.

"To tell the truth, without tax breaks, I'm pretty certain we'd be in Canada right now," Cage told *Develop*.

The Quantic Dream boss confirmed that France's generous tax credits policy – which provides studios a 20 per cent refund on production costs – had significantly helped the development of their Heavy Rain project.

But he rejected the notion that video games studios are living it easy with the extra help in the form of tax breaks from their governments.

"Tax breaks are not a 'benefit'," he told *Develop*. "They are used to do a better job. Simple as that. If there were no tax breaks… well, *Heavy Rain* would probably still exist, but a lot less money would have been spent on it.

"If you miss a milestone, it's only the money that keeps your project away from death."

Quantic Dream launched *Heavy Rain* in February last year, and since then, the French studio has seen worldwide critical acclaim and awards.

But the studio itself is in a constant race with other games developers across the globe, Cage said, and Canada's tax break haven is giving the Maple Leaf an edge.

"When a game arrives, people just compare the titles, people just look at if it works or not," Cage said.

"They don't look to see if our studio is fighting with the same weapons as a Canadian studio.

"Life is easy in Canada. You've got all the money in the world. You can recruit like mad over there. You'll have tax breaks and more tax breaks and nearly 40 per cent tax breaks on every project that you do. It's crazy.

"The French games industry couldn't compete without tax breaks. And I look at the UK and think it's all quite depressing."

> ***"The French games industry couldn't compete without tax breaks. And I look at the UK and think it's all quite depressing."***
> David Cage, Quantic Dream

Quantic Dream received critical acclaim for Heavy Rain, which David Cage says would have had millions less spent on it without tax breaks

Editorial

STAR POWER

THERE'S A moment, 721 words into our interview with him that Cliffy B makes an excellent, if contentious point.

I won't spoil it, but it's the one about not being an awkward looking social misfit developer in order to make yourself famous, a 'power creative' as he calls it, just like him.

I know what you're thinking.

'Who the hell does this good-looking guy think he is, with his 117,359 Twitter followers, personable nature, esteemed industry reputation, regular TV appearances, enviable CV of game credits, beautiful fiance and… oh.'

Exactly.

No one says Cliffy B is perfect – first of all Cliff himself, just check out his anecdote about a tweet with the word 'cum' in it.

But when it comes to an answer to the 'How can we have games superstars akin to Hollywood superstars?' people like him are the closest thing to a perfect answer.

I was sat front row at GDC 2008 when he chainsawed his way through the scenery to unveil *Gears of War 2*.

It was a preposterous moment, for any medium, let alone just games.

Would George Lucas wave a toy lightsaber to unveil his next bit of *Star Wars* merchandise? Or JK Rowling cast fake spells with a wand when talking about a new *Potter* movie? Yet Bleszinski pulled it off.

He and his games may not have appeal to everyone – one of his aliases is, after all, 'Dude Huge' – but Bleszinski has managed to not only court the media and build a reputation, he's got form as a game designer and design director of note. As he says, he knows when to be PR, and when to be a person.

Forget the jokes about appearance: that's the unique skill that made him famous. And one you'll want to learn yourself as developers become more connected to their audience.

Michael French
michael.french@intentmedia.co.uk

The gears

With Gears of War concluded, **Will Freeman** asks Cliffy B what other developers can do to become a games dev superstar

Cliff Bleszinski is the game development celebrity incarnate. He has famously devoted Twitter following, and is mobbed by fans wherever he goes.

By his own confession he is a brand almost as much as his recently completed *Gears of War* series, and as a result he has enjoyed a very successful career. So how can you do the same?

Develop asks the man himself.

When you spoke at GDC this year you talked about presenting yourself as a brand. Should all developers aspire to become one?

I've found that the talk was well received. I was able to – I hate to reuse this term because it sounds so cheesy, and it's from *30 Rock's* Tracy Jordan I believe –'drop truth bombs on your ass'.

It was just a lot of things on my chest that I believe not a lot a lot of developers really have it in them to say, or the capacity or the ability. The funny thing was that when I said I've never met a Rockstar employee in that talk, shortly after that I got an email from Sam Houser saying 'anytime you're in New York lets have dinner'. I said 'sure man, but who built your games? I'd love to meet them too'.

This is why if a developer Tweets me and I can check them out and really see that they're legit, I will follow them and we'll have back and forth interactions. Not only because I'm an advocate of developers, but because its also a nice recruiting tactic.

I go from being that guy who does all the interviews and talks to becoming a real person and we can actually work together and be creative together. Developers by nature were the ones at the back of the class drawing in their pad, and not the ones going to parties and things like that, so they have a hard time of putting themselves out there. Its not always easy for the majority of them, but the best thing you can do for your career is to be an actual name as opposed to just, and I hate to say it, a gear in the machine.

In terms of becoming a brand, what advice would you give to the new school of indie developers?

With Notch, a lot of the news from *Minecraft* comes directly from his Twitter account. He and I have a playful banter back and forth on there which is great because he's a cool guy and helps gives me indie cred to talk to him and know that the first PC game I bought in years was *Minecraft*.

But look at him, he's got over 300,000 followers and he has the hat. Clearly the guy gets a certain amount of the branding right, he's got the cool nickname, he's got the hat he wears everywhere. You spot him and know what he looks like. He's an example like John Blow.

I know who these guys are more so than others. I mean, I've had developers send me their resumes who worked on triple-A titles and I'm like: 'I've worked in this industry for 20 years and I've never met you?' They say 'Oh, I never got to go to GDC or anything like that' and I'm like: 'Yeah. That's probably by design, or people aren't getting paid what they're worth'.

Now you only see agencies getting involved to make sure that developers do get paid well because by and large, those who are creative will always have the money surgically removed from them by those who are business people.

And what about those indies that have the potential to be in that position in a couple of years time, or a few months?

Well, first you have to make great games. If *Gears of War 3* was getting horrible reviews then suddenly next year, if we're working on something, nobody would want to talk. It's just the truth of the matter. You go into what is the games equivalent of movie jail.

First and foremost, make a great game but also have a personality. Be the guy with the hip glasses, with the one gauge earring and the gamer tattoo all the way to the sleeves with a skateboard. Stand out.

Don't be a developer archetype: There's the big chubby guy with the beard. There's the super skinny guy with the glasses.

# of change

“Don’t be a developer archetype: the big chubby guy with the beard, the super skinny guy with the glasses, the creepy guy who smells funny who’s awkward and hovers around. Do something so that people know who you are.”

There’s the creepy guy who smells funny who’s awkward and hovers around people. There’s the different types, right?

Be a person, be a brand. Just do something so that people know who you are. Have an online presence more than ever. Understand social channels. Look at people like Veronica Belmont who puts herself out there and now has over a million followers. I know actors who have been in Oscar winning films who don’t have that much. It is the digital age in which we live.

You’re a normal person, but you’re living a life in the public eye. What advice would you give dealing with the pressure and experience of that?

It’s fine, honestly. It’s fun. I haven’t had anyone be overly negative with it yet. I do occasionally get in trouble for some tweets once in a while. There is a comedian that I follow who tweeted at one point ‘Drinking cum makes pineapple juice smell delicious’ which I thought was quite hilarious, but PR pointed out the point that it’s not edgy; just pretty fucking gross.

I’m honestly having the time of my life and I feel this weird responsibility to share it with people. Being a games developer and getting to work on all this creative stuff and travelling the world, meeting celebs – all that stuff. This is hopefully helping to redefine the image of what it means to be a creative in 2011.

***Gears of War 3* is the final game of the series. So much of brand-Cliffy B and *Gears of War* are interlinked. How does that leave you feeling?**

I’m relieved. There’s so many stories that can be told in this world. The brand is stronger than ever. Hopefully the game sells more than *Gears* one or two, but we’ll see. The final cut scene still gets me a little bit misty eyed when I watch it. I don’t know if it’s because I’ve been working on the franchise for so long or just because a lot of it is personal for all of us on the development team.

HOW TO B CLIFFY

1 Craft a unique image

"Be a person, be a brand. Just do something so that people know who you are."

2 Make your games personal

"Make something that's deeply personal. You know, a metaphor for family or abuse or experience or loves lost."

3 Speak your mind on Twitter

"I do occasionally get in trouble for some tweets once in a while."

4 Listen to your producer

"I have an amazing producer. That's the ebb and flow."

5 Get some social skills

"There's the creepy guy who smells funny who's awkward and hovers around people."

Cliffy B knows how to milk a photo opp as shown here (above right) skateboarding in the offices of Microsoft's UK PR agency when posing for Develop

My main advice that I tell a lot of developers is just make sure you make your game personal.

Don't make just what you think the market will want. Don't make it like 'I loved bunnies when I was growing up so I'm gonna make a game about bunnies'. Make something that's deeply personal.

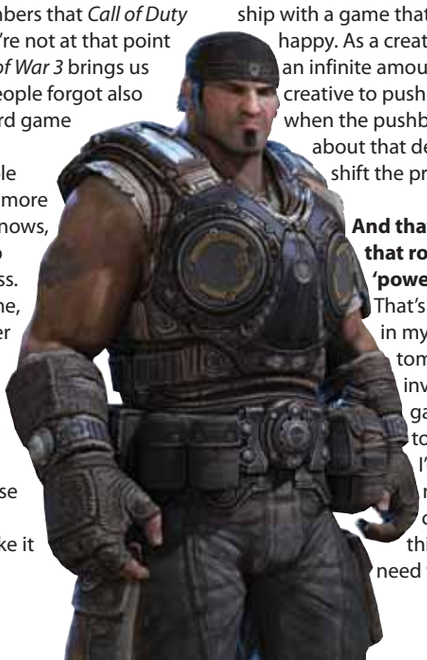
You know, a metaphor for family or abuse or experience or loves lost. I guarantee you the creator behind the cult PS3 game *Catherine* has got some stuff going on. So make games personal and ultimately they'll resonate, and you know if the game sells well maybe you'll have a chance to keep exploring those themes.

Obviously *Gears of War* has done well. Do you feel satisfied at this concluding point?
No. We can do better. We can always do better. The number of gamers playing the game online – I'm hoping *Gears of War 3* has more than *Gears* 1 or 2 ever did, especially considering how competitive the market is.

You look at the numbers that *Call of Duty* and *Halo* pulls and we're not at that point yet. I'm hoping *Gears of War 3* brings us closer to that point. People forgot also that we're only the third game of the series.

There's been a couple more *Halo's* and a few more *Call of Duty's* so who knows, maybe we'll be able to build upon that success.

I want with this game, more so than any other game we've ever made, for people to avoid the perception of what the game is. If you haven't played a *Gears* game, now please give this one a try. We really do think you'll like it a lot.



Concluding a creative opus like *Gears of War* must have been difficult. Calling it a wrap in particular, must have been near impossible for you.
Creatively, the second you ship a game all you see is the holes. Earlier, me and some colleagues were talking about George Lucas and how he can't resist putting his grubby little mitts all over everything.

That's because, if I could go back, as there's tons of things I would change about *Gears*, tons of things I'd change about *Gears 2*, and even *Gears 3*. I'd tweak things in it. The key is knowing when to stop because we're still a business and you have to ship a damn game and sell it at some point.

So, from a creative culture perspective, how do you balance that need to respect business and your vision for your games?
I have an amazing producer. That's the ebb and flow. Whereas I'm asking for 40 weapons, and Rod and the other producers are certain we can only do 25, I have to make a choice.

There's a certain minimum that you can ship with a game that will make your gamers happy. As a creative you will always want an infinite amount and it's your job as a creative to push for that too much and when the pushback comes, be mature about that decision and ultimately shift the product.

And that's part of building that role as a what you call a 'power creative'?
That's one of the things I said in my talk. If I went off tomorrow and some investors came along and gave me a billion dollars to make my dream game I'd be terrified because I need that system of checks and balances. I think as a creative you need to be edited.

There's certain film directors who have a certain amount of success and then they go and make this one movie that they want that's three and a half hours and you end up thinking: 'really dude? I liked your old one that was two hours long'.

There's the same thing with authors who reach a certain amount of success. Book one is a normal thickness, book two is a normal thickness as well, and then book three becomes 1,000 pages because they have this sense that 'this was the story I had always wanted to tell'.

> ***"Make something that's deeply personal. You know, a metaphor for family or abuse or experience or loves lost."***
>
> Cliff Bleszinski, Epic Games

Half of the time when you see the directors cut of a movie, you're like 'actually I can see why they cut all that out'. You need that system of checks and balances to keep creators in check sometimes. We're not just art, we're still a business.

Having finished *Gears of War*, do you have a feeling of creative freedom, or is that intimidating to you?
I feel like we've wrapped it up and put a bow on it. It is what it is and we've put it under the tree for the proverbial Christmas morning.

But that said, there's the long history of this war, tons of different stories to tell and thematically if you figure what makes a *Gears* game in the future, there's a lot of different directions we could go in. I'm not burnt out on it anywhere as some might assume or think.

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Online games experts to speak at London Games Conference

Schedule and line-up locked in for November 10th conference – discounts for UKIE and Tiga members

LONDON GAMES CONFERENCE SPEAKER LINE-UP

Jason Holtman, head of biz dev, Valve, **Mike Mauler,** international EVP, GameStop, **David Bishop,** senior designer, PopCap, **Tom Paquin,** CTO OnLive, **Peter Molyneux,** founder, Lionhead, **Ian Livingstone,** life president, Eidos, **John Clark,** UK MD, Sega, **Feargal Sharkey,** CEO, UK Music, **Nick Parker,** Screen Digest, **Nicholas Lovell,** GamesBrief, **Prof Peter Sommer,** digital forensics expert, **Guillaume Rambourg,** MD, GoG.com

The London Games Conference will feature focused discussions and keynotes from a host of top industry professionals

DIGITAL GAMES experts from around the world will convene in London this November.

The final schedule for November 10th's London Games Conference has been set, with speakers from leading online games firms PopCap, OnLive and Good Old Games plus analyst Nick Parker joining the roster.

A full schedule can be found on the right.

PopCap's senior designer David Bishop and GoG.com MD Guillaume Rambourg will take part in a series of 'micro-keynotes' detailing the lessons learned as leading developers of online games.

Casual gaming firm PopCap is best known for the likes of *Bejewelled* and *Plants vs Zombies*, and was earlier this year acquired by Electronic Arts.

Good Old Games (GoG.com) meanwhile is one of the most successful digital distributors of games, building its business on a range of older PC titles updated to run on new machines – it is owned by Polish games studio CD Project.

Meanwhile, OnLive's CTO Tom Paquin will host a session looking at cloud gaming. Paquin isn't just a games expert, but a leading name in Silicon Valley, having co-founded Netscape, the online firm that invented key technology such as SSL and web 'cookies', and then co-founded the Firefox browser firm Mozilla.

Elsewhere, analyst Nick Parker will take to the stage to deliver his views on the five events set to reshape the games industry.

The four big names join an already-excellent roster of previously announced speakers focused on how the games industry is embracing the transition to digital content.

Keynotes this year come from GameStop and Valve, with Eidos life president Ian Livingstone, Microsoft Game Studios Europe creative director Peter Molyneux and Sega's John Clark also set to deliver talks.

Other sessions will look at which companies will not survive the digital transition, what games can learn from the music industry, and how deeply security compromises have impacted publishers are also on the agenda.

London Games Conference takes place at One Wimpole Street, central London, and starts at 4pm. The four-hour conference is followed by dinner and networking. The event is sponsored by IGN UK.

Tickets are available for £269, with discounts for UKIE and Tiga members.

LONDON GAMES CONFERENCE SCHEDULE AND THEMES

4pm Opening remarks
4.05pm OPENING KEYNOTE: GameStop (Mike Mauler)
4.35pm The Digital Transition: The Winners and Losers (Nicholas Lovell)
4.55pm Sega & Digital Distribution (John Clark)
5.15pm Digital Developers Share Their Secrets (Guillaume Rambourg, GoG.com and David Bishop, PopCap)
5.35pm The Future of Video Games (Peter Molyneux & Ian Livingstone)
6.15pm Coffee break
6.40pm What Video Games Can Learn From Music (Feargal Sharkey)
7.00pm The 5 Events That Will Change Video Games (Nick Parker)
7.10pm Video Games and Digital Security (Professor Sommer)
7.30pm OnLive & Cloud Gaming (Tom Paquin)
7.50pm CLOSING KEYNOTE: Valve (Jason Holtman)
8.20pm Dinner & networking

To book a place, contact **Hannah.Short@intentmedia.co.uk** or call **01992 535 646**. High-profile sponsorship slots are available - contact **Lucy.Hall@intentmedia.co.uk** or call her on **01992 535 647** to find out more.

First among sequels

Gearbox Software recently blasted sequels that lazily rehash the assets of their predecessors. So **Will Freeman** asked concept designer Scott Kester – will Borderlands 2 be any different?

Through a 'kit-mash' design approach inspired by the customisation of modeling kits, the Borlderlands 2 team are convinced they've made a distinct sequel

Gearbox insists that *Borderlands 2* is something much more significant than a typical sequel. Isn't that something any developer would claim?
From the start we wanted to make a 'true sequel'. We really didn't want to just re-skin environments and rework textures. Of course there is a little bit of reusing assets; stuff that will make the game familiar in the right way. Characters like the psycho bandits make a return.

But what was really important to us when making *Borderlands 2* was to take what we did with the first game and do more of it, give it more variety in every context.

There were so many new ideas for this from our designers and across our office; almost more than we needed.

That meant it was very important for everyone from the designers to us on the conceptual side of the design that – with so many ideas that we were all very passionate about – the game should not become a design clone.

But you must have to balance that devotion to new ideas with delivering a video game that is in spirit the same as the first *Borderlands*.
We do really have to be focused. Sometimes somebody from another internal project would come onto *Borderlands 2* and do something or conceive something and we'd have to be honest if it missed the point of what *Borderlands* is. We'd just have to say no.

That said, one thing that's really interesting from the conceptual side is that all of the guys here have certain things that they are better at, and in trusting in that there is a degree of freedom to what goes into *Borderlands*.

So, for example, I've concentrated on the characters and creatures and some environment stuff, and then there's a designer I work with who can do anything but is really creative with guns, so he's going to do guns for the game.

With that kind of focused talent, when we're designing stuff, it's not so much about designing something to fit into a box that is considered *Borderlands*, but about what we have designed that can go in there. That helps make the sequel its own.

> ***"You could say we take these elements that maybe shouldn't go together, and through creativity make them work."***
> Scott Kester, Gearbox Software

And part of how we define *Borderlands 2* is by letting the project be really personal if you're a game designer or level designer or concept designer. We put in a lot of ourselves to the game.

So, for example I wear a lot of skateboarding stuff, so maybe I'll try and take that personal style and make it influence the design of one of the characters I'm working on.

There's a little more of me coming in, and it gives the character a little more; some more depth, and more the player can associate with. So letting aspects of our team's real world style in is part of the consistency of *Borderlands*.

So that investment of personal style is actively encouraged? Is it part of the creative approach at Gearbox Software?
Yes, definitely. The first game had a very different style, and after that what we were seeing was people's idealised vision of what they felt that style had to be. It was becoming watered down in its approach.

So when we really looked at the sequel, for example when we changed the art style and I took on doing the characters, it was a chance to do things from a completely different viewpoint. In designing the sequel, we decided it was better to shoot further and pull yourself back then take a design side step.

In the first game if somebody suggested an idea and it was seen as perhaps too ridiculous, it might have still been done and put in and it was realised to be awesome.

I'm not saying we're these total rogues, as we still filter things for quality very carefully, but I hope it showed in the first game and will show in this one, that there's a lot of little touches and nuances all over, that, within reason, show personal flair. We have to keep an eye on what is too far, but it's there.

So what's too far? How do you keep it under control?
It is hard to quantify, and there's not exactly a rule set or anything like that. We try to encourage our team to always keep humour in there, but we don't want it to just turn into lots of silly humour that just invalidates the seriousness of the gameworld, events and so on.

It's kind of hard to say what works and what doesn't, as sometimes somebody does a concept or creates something that clearly belongs somewhere else. A lot of the

Borderlands aesthetic is that sort of 'kit-mash' mentality of finding things and putting them together, so it's hard to say what works until you do it.

We have a slogan, and kind of joke about our design approach, that is 'kit-mash the way to victory', kit-mashing being the model making process of mixing-up and combining different model kits. You could say we take these elements that maybe shouldn't go together, and through creativity make them work residing in the same space.

How many of the original *Borderlands* team is working on *Borderlands 2*? Is that even important to balancing making the sequel feel original with capturing the spirit of the first?

There's people from the first game here, and new people, and they all have their own opinion. We're not here to shoot down new ideas. People can always prove to us their ideas are good.

And it's interesting to see how the team members influence each other in the development. We take each other's concepts and add our own ideas, and maybe even take something too far in our direction, but then inspire each other through that process. That's how we can find that perfect balance between something totally new and something that connects with the first game.

So a collaborative approach is important to Gearbox's goal of making what you called a 'true sequel'?

We're very open with each other about ideas that suck and ideas that don't work. That's part of it. One of the things you learn is not to get attached to your ideas until they become a reality.

How does Gearbox's approach to technology serve to help you distinguish a sequel from its predecessor?

We use Unreal Engine, and we do some things with Unreal that other people haven't done. That is something everybody who uses Unreal probably does, and our tech guys spend a lot of time creating a distinct system. It's a very intense set-up that allows us to do something new in each game.

From a concept design perspective the practice of differentiating *Borderlands 2* from the first game must have been a interesting process.

It's really interesting in that we were trying to take something that people know and show them something new that they still know and understand. We want people to see a totally new character and understand that it's *Borderlands*. We don't want to just imitate ourselves, and I think sometimes developers paint themselves into a corner knowing people expect they will do something a certain way.

That's why it's really important to keep iterating on the subtle things in the building of a game that the general public might not even notice. There need to be constant evolutions of how you use your constraints creatively, and it's an interesting dilemma.

www.gearboxsoftware.com

Gearbox SoftWare's concept designer Scott Kester has been given the oppotunity to inject his own personal style and tastes into some of Borderlands 2's characters

ANATOMY OF A BLOCKBUSTER

Our monthly dissection of a recent hit game...

Tiny Tower

PUBLISHER: NimbleBit
DEVELOPER: NimbleBit
FORMAT: iOS
PRICE: Free (microtransactions)
www.nimblebit.com

THE SENSATION

A textbook iOS success story, from the moment it was released *Tiny Tower* enchanted the global iPhone user.

Its glorious debut reportedly saw a million copies downloaded in its first four days on release, and it quickly became a favourite water cooler talking point for the iOS trendsetters: 'Are you playing it?', 'How does your tower look?' And that all important question: 'How many floors do you have?'.

During July 2011, if you weren't the landlord of a diminutive virtual skyscraper, you simply weren't in with the games industry elite.

THE GAME

The premise of *Tiny Tower* is a simple one. One floor at a time, the player must construct a soaring concrete building, filling its rooms with a variety of residential apartments, services, retailers and entertainment spaces, always carefully balancing the ecosystem to maximise efficiency and growth.

Metaphorically and near-literally, *Tiny Tower* serves up a neat vertical slice of the *SimCity* game concept.

Heavily focused on a compulsion loop that has proved furiously addictive the world over, it also plays itself in the background, even when your iPhone is out of battery. It is built around a freemium model that tempts users to part with their cash in return for faster access to funds.

THE STUDIO

Before Tiny Tower's foundations were laid, NimbleBit was already infamous in the industry as the team that created amphibian-breeding iOS game *Pocket Frogs*; a title synonymous with compulsion loop game design. The studio has a healthy back catalogue of iOS releases, and like so many app developers, is somewhat publicity shy.

UNIQUE SELLING POINT

There are numerous games inspired by *SimCity*, and the ballooning of the number of titles built around tight compulsion loops is well documented.

How *Tiny Tower* stands out from its dense crowd of rivals is through its character. From the name of its residents to the colour schemes of each floor, much of the game is randomised, resulting in an experience that feels very personal to the end-user. They may be near identical the world over, but each *Tiny Tower* constructed feels like a completely unique creation.

It also does a fine job of crafting an illusion of depth, and most importantly boasts a way player's can share how they're doing; the tower itself. At a glance *Tiny Tower* builders can see – and show – how they are progressing by viewing their blossoming skyscraper in its entirety, resplendent with tiny residents beavering away.

WHY IT WORKS

Nimblebit's creation is the game that keeps on giving. There's always new stock arriving, residents moving in and percentage bars reaching completion. What's more, *Tiny Tower's* manically repeating core game loop of restock-sell-buy is so compact and tidy that it can run dozens of times simultaneously without complicating the gameplay. The result is a title that constantly rewards the player, and relentlessly asks for more. It is compelling to play long beyond the point when it has stopped being explicitly fun, and even after the consumer has realised it's apparent depth is all an illusion, it still charms them into diving into its shallow waters.

TRY IT YOURSELF

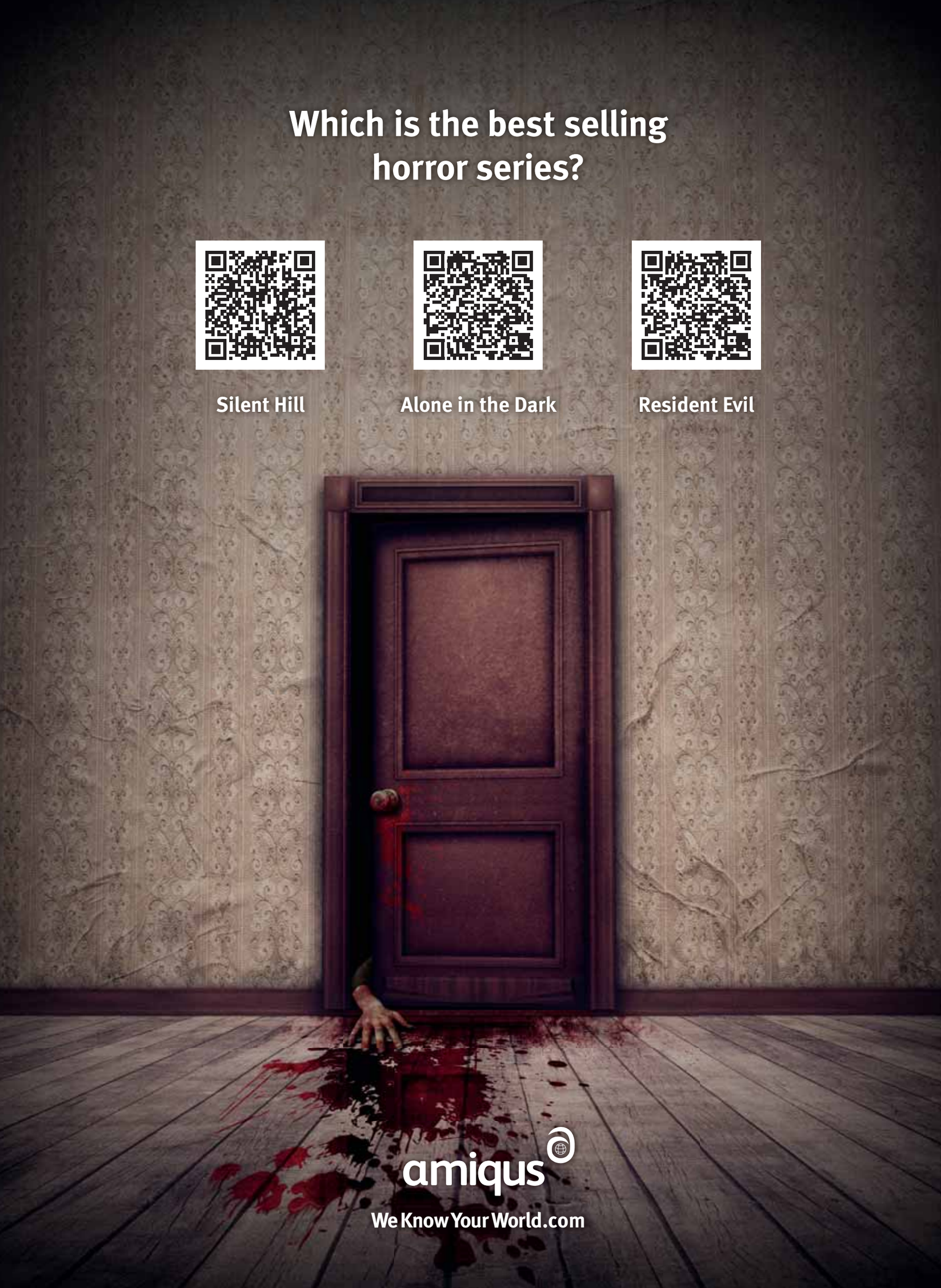
Do what *Tiny Tower* did to the god game. Choose a well loved strategy genre, and boil it down to its most basic form. Don't be afraid of giving your audience something so simple they can learn it all in three minutes. That's the point.

Then create a short compulsion loop – keep it to three or four basic stages – and integrate that into you game.

Don't put a compulsion loop over the top of a theme; put it into your creation's theme. Have it repeat over and over, slowing down its rotation gradually as the game progresses and the player gains experience.

Now comes the tricky part. You need to craft a suggestion of strategy so that the user feels they are playing in their own way. It needs to be easy to stumble upon, but not essential to play the game.

And, if you're fashioning a compulsion loop to make yourself some money, you'll probably want to add in a way the player can fill up those percentage bars a little bit faster with some in-game currency.


Which is the best selling horror series?
Silent Hill
Alone in the Dark
Resident Evil
amiqus
We Know Your World.com

//COMMENT: BUSINESS

Doom-mongers beware

by **Nick Gibson**, Games Investor Consulting

RECENTLY, an anonymous publishing executive declared publically that the 3DS is "definitely dead" unless Nintendo generates good sales this Christmas.

The surprising finality of this proclamation, even allowing for the 'unless' parachute clause, is by no means singular. Industry history is littered with flawed prognoses of doom for games platforms, which seem to come thicker and faster in times of change such as these. This month I'll explore what makes senior industry execs – and journalists – so unafraid to risk their reputations with such bold predictions of outright failure.

Sony's PlayStation 3 launch was widely described as a 'failure' in the games press, as seemingly slow hardware sales after launch week triggered overblown, doom-laden declarations from senior industry figures. "The PS3 is a total disaster," said one of the industry's most vocal and successful CEOs in 2007, advising Sony that "they should just cancel it and do a do over".

While Sony would undoubtedly have welcomed higher sales in its first 12 months, it was far from the disaster so many declared; and with over 53m unit sales since then, the doomsayers now simply look naive.

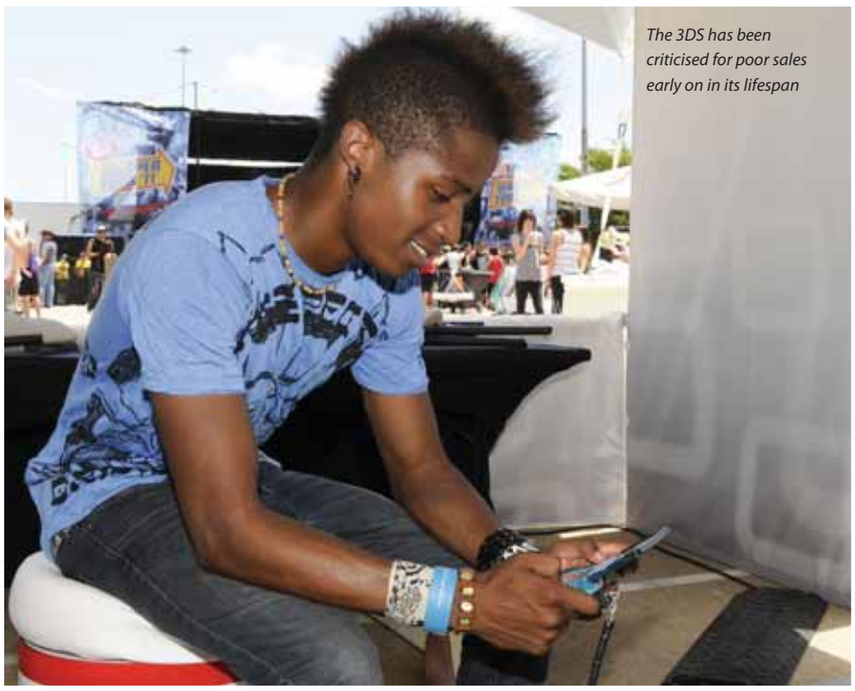
IN THE RUNNING

Many went astray by erroneously extrapolating a short-term trend into a long-term one. Despite this being Sony's third (TV-based) console launch, the doomsayers ignored Sony's track record and, more relevantly, the same sluggish starts to all its previous consoles' lives. Sony pioneered the ten-year console lifecycle with the first PlayStation, then extended it with the second and should accomplish the same longevity with the PS3.

To achieve this, Sony sensibly views console sales as a marathon during which an explosive early sprint – for example, through aggressive pricing – is not only commercially inappropriate but would have proved detrimental to performance later in the race (leaving less room for later sales stimulation by price cuts). These are lessons that all console manufacturers have begun to take on board.

Besides this commercial myopia, the other explanation for these outbursts derives from publishing execs panicking about their massive investment in new platforms not being sustained by sales in a particular month or quarter and simply seeking someone else to blame for their company's underperformance (and their over-estimates).

This self-interest lies at the heart of many world-ending pronouncements for broader sections of the games industry. Retail gaming and the console business as a whole have been declared dead or facing an imminent fatal demise so many times they should be regulars in George Romero movies. These terminal diagnoses are usually given by those with vested interests in their death; for example, digital distributors or mobile games developers. Console-oriented companies give as good pessimistic hyperbole as they get; take the still common (and frankly risible) claim that social is just a fad.



The 3DS has been criticised for poor sales early on in its lifespan

> ***"Industry history is littered with flawed prognoses of doom for games platforms, which seem to come thicker and faster in times of change."***

THE PSN'D IS NIGH?

Although there certainly are examples of complete commercial failure for certain platforms, most have proven extremely resilient. A great example of this was the PSN outage earlier this year, which generated the full gamut of reactionary headlines and poll research which quantified the extent to which Sony would experience a customer exodus.

"55 per cent said the PSN breach would put them off buying future Sony consoles," claimed one article. "Gamers will simply no longer trust Sony," stated another. The truth was that the PSN outage of April and May plus the accompanying consumer and media furore has had absolutely no negative impact on the ongoing sales of PS3 hardware and retail software sales.

Hardware sales between April and June were actually higher than the previous year as were software sales which even experienced a noticeable upwards spike in May and June. In the three months since it was restored, PSN has seen three million new registrations and digital sales that are already above pre-outage levels.

In this case, those carrying their 'the end of the world is nigh' placards forgot that most PS3 owners have little choice when it comes to high-end gaming (owning no high-spec PC or other consoles). That there is a sizeable core of console owners whose loyalty survives such tests, and that most players are oblivious to, or simply not interested in, such industry travails.

So, is the anonymous publisher correct in his comments about the 3DS's prospects? No format enjoys weak holiday sales, so his 'parachute' is banal. This 'few months to live' prognosis seems remarkably misguided – as if Nintendo would abandon such a major new format after just nine months on sale. 3D has its flaws and Nintendo its challenges, but 3DS has several tactical tricks to play before giving up the ghost.

Whatever you believe, these panicky views are best taken with a pinch of salt and a longer view.

Nick Gibson is a director at Games Investor Consulting, providing research, strategy consulting and corporate finance services to the games, media and finance industries. **www.gamesinvestor.com**

//COMMENT: DESIGN

The Changing Face of Gaming

by **David Braben**, Frontier Developments

WHAT IS happening to our beloved video games controller?

NEW PLAYERS DON'T GET IT

In the last few years we have seen some dramatic changes to gaming, but specifically we have seen big changes to the interface for games. Our last such change was probably the introduction of analogue controllers; a much smaller change, and before that the move from keyboard to joystick and joypad.

This time there are at least three types of interface, perhaps four: Kinect, inertial motion sensing (Wii, Move), and touch-screens – with the rise of voice input waiting in the wings.

All are quite intuitive, and we are starting to see hybrids of these like Wii U, too. The fact they are intuitive is bringing in new people, put off by controllers and keyboards, to gaming. It is also creating a raft of exciting new opportunities.

> ***"The fact they are intuitive is bringing in new people, put off by controllers and keyboards, to gaming. It is also creating a raft of exciting new opportunities."***

STUDENTS DON'T WANT IT

I recently attended the excellent Dare Protoplay event in Dundee. Teams of students competed to produce games in nine weeks, which are then judged by both the public and a panel of judges. The students have a free choice of what to make, and the platform and user interface system to run it upon. The amazing thing is of the games I saw, none of them used a controller. Five were on Kinect running on a PC, one on Move, and the rest on iPad (using Unity) or Windows Phone 7 (using XNA). As a test of mood at least, the perception amongst those students was that they want to work on something new, and, amazingly to me, the controller didn't feature.

WHAT ABOUT DEVELOPERS?

Of the four games Frontier is shipping this year, the same applies (two on Kinect, two on touch screens). Don't get me wrong, the controller is still an important part of our business – *The Outsider*, currently on hold, uses a controller – but the real change is, like it or not, the controller is now just a part of what we do.

The classic controller may be a jack-of-all-trades but the new user interfaces such as Kinect, inertial motion sensing and touch-screens seem to be the future of gaming

AND ME?

For me personally, in the little time I get to play other people's games at this time of year, they are still mostly controller-based – having recently finished Valve's excellent *Portal 2*, and getting back to *Red Dead Redemption* – but increasingly I have been playing on the iPad, too.

It hasn't reduced the time I get to spend on console games, but I have found I play at times when that option simply isn't there, like at airports and on the train.

SO WHAT IS THE CONTROLLER GOOD FOR?

Thinking about it some more, the controller is best suited to 'twitch' games, especially shooters, and even then a mouse can offer much better precision for quickly changing aim direction.

For selecting a location on a map, whether it's in *Red Dead* or in a strategy game, a touchpad is ideal – indeed the controller is probably the worst of our existing set of input devices for such things.

For a car racing game, a steering wheel is a great deal better, for a flight sim, a joystick or yoke is better.

Perhaps we should happily embrace hybrid systems? We wouldn't think of using a keyboard or mouse separately these days. I for one have a chatpad on my 360 and a wireless keyboard on my PS3 for those annoying 16 digit codes we are forced to type in, because without those, the controller is painful for text entry.

Summing up, the point of this piece is not to criticise the controller – it is a great jack-of-all-trades input device, one of the best for many things – but to draw attention to the sometimes unthinking and often childish partisanship that can happen in our industry criticising new interfaces.

We should embrace the new audiences they are bringing, and yes, not forget the existing one. I also feel I have to mention one of my soapboxes about hybrid controls – let's see *Call of Duty* with lean left and right on Kinect.

David Braben is the founder of Frontier Developments. Best known as the co-creator of *Elite*, Braben has contributed to a number of other projects including *Frontier: Elite II*, *Thrillville*, *LostWinds* and Kinectimals.
www.frontier.co.uk

//COMMENT: STUDIO MANAGEMENT

We're all agile

by **Tim Heaton**, The Creative Assembly

The Creative Assembly says its games are successful because they push responsibility down onto the functional groups

JUST over ten years ago a group of software developers and managers got together and created the Agile Manifesto.

It was a reaction to the formal heavyweight approaches to software development used previously – highly defined, managed and staged processes that were failing to deliver, causing massive slips and budget overruns. The Agile Manifesto and its underlying principles are available at agilemanifesto.org for anyone who's interested – and everyone who makes games should be. The principles and values listed are inarguably valuable, and to some degree common sense.

From these philosophies several methodologies were created, the best known of which is probably Scrum. It's possible to see some of these methods as franchises, or even cults. They consist of a fairly rigid set of rules, rituals and symbols that offer up a guaranteed entrance to the promised land – that is, delivering great games.

LESS AND MORE

Now, for some software categories and some team types I have no doubt that having a prescribed method of working, based upon sound principles, is valuable and successful.

Scrum has been popular in games development for a while now, and interestingly, it also seems to have created a backlash from people who have tried it and failed to achieve the nirvana it promises. I think successful games development requires more open minds and less manifestos.

Different successful teams work in different ways. Their dynamics are different. Some teams work to a clear leader – maybe an auteur figure who, by sheer force of will, can communicate and incentivise everyone.

Some self-organise and resent regular direction. Most teams are really made up of smaller teams, and those may well differ between themselves. Like any sophisticated organism, a team forms like this because of environmental factors. Somebody's recruiting a certain type of person, and they're being mentored in a certain way.

> ***"The truth is that any successful games team is already agile to any real definitions of the philosophy. Those that aren't are either shut or failing."***

Priorities for the game cause different elements to exert different influences. Those who don't fit the team, or who have different values, leave. Teams self-reinforce and create their own personalities.

Teams are also highly complex systems. They're not necessarily complicated, in that how they operate can be relatively easily understood, but complex in that small inputs can have large, unpredictable results. For example, increase a tools capability to allow iteration from a one-minute cycle to immediate – it's possible that's a tipping point that may change the whole way a team works.

A team's priorities, methods and personality also change through a development cycle. Creativity and production control wax and wane throughout a game's development. Certain disciplines and individual staff will have greater or lesser input at certain times.

TOOLBOX CLEVER

So project management techniques need to match their teams, and need to be dynamic. The only way to do that is to have a toolbox of ways to approach problems, and to have the ability to be sensitive to how a team works. It's possible then to offer advice and experience and maybe propose some very specific tools.

The truth is that any successful games team is already agile to any real definitions of the philosophy. Those that aren't are either shut or failing. Our *Total War* team has been making strategy games based on clearly defined pillars for well over ten years now. It's a big team and responsibilities and abilities are reasonably clear. In theory that team could make the *Total War* games with traditional waterfall techniques, starting with a fairly formal game design from the beginning. But it would likely fail, because we'd be missing opportunities.

We push responsibility down onto the functional groups (battle, campaign, UI and so on), we try and keep the game working, we're happy to change features in and out as others compete for time, or don't deliver the goods on early inspection. Certain design briefs are created 'just in time', which frustrates some but means we're making the best decisions with the latest knowledge. And all the time the key opinion-formers discuss the validity of the work being done.

It feels pretty agile. However, because of the mix of skills, the mix of abilities and the fact that there are some hugely experienced leaders who we need to exert their influence across the team, we don't use an off-the-shelf methodology that perhaps promises more than it can deliver. We still schedule work in a GANTT type manner, and still allow key staff to exert influence directly onto teams at any stage.

Any methodology is interesting, and can be another component in the toolset. But it's just that; something to trigger off a way of thinking about a problem, not necessarily a solution. To quote from a time before Agile, there are no silver bullets.

Tim Heaton is studio director at The Creative Assembly, the UK-founded studio behind the acclaimed *Total War* series of PC games, as well as numerous other works including original and licensed products. **www.creative-assembly.co.uk**

//COMMENT: MOBILE

Stories from the post-free world

by **Will Luton**, Mobile Pie

WHEN I WAS asked to write this column I promised to myself that I would avoid writing about free. I'd covered it a lot, as has everyone else, at conferences and in specialist press and it's fast becoming old and rather tired.

Yet I still see lots of young start-ups – and repositioning giants – chucking out numbers about how well they've done with free over paid. When we at Mobile Pie launched *Top Trumps* for iOS recently we pushed a free version with an up sell to premium branded decks and then those premium decks as paid, individual apps. *Top Trumps Collection* – the free one – hit number three in the UK all apps chart and the top-50 grossing, whilst the paid apps, well, didn't.

FREE TO MOVE ON

These sort of stories garner a lot of attention in the press, so I guess there's still a lot of people out there scratching their heads. What's going on is simple. We are now in a post-free world.

The free model has been robustly proven. It does well where it can be applied – at the moment mostly web and mobile – and it will continue to do so. Unless of course the predicted consumer free burnout happens. Which it won't.

The reason why I'm certain it won't happen is because what's hot now is not free itself but the new ways of using free which are financially viable and creatively progressive.

I don't have the keys to the 'Future of Free Castle' and I won't pretend to. What I do have, having designed, released and supported several free games, is a knowledge of the basics. Which I would like to share with you in a contrived, awkward metaphor.

It all starts in a far away kingdom where games are actually theme parks. Some parks have fences surrounding them, that millions jump over daily, and a ticket booth. That's a paid game.

A free game is another type of park, a park that has no ticket booth and no fence. People stroll in and out of these parks freely. Inside the park they get access to the rides and the picnic area, where their friends are, for free. They have to queue, but they are free.

So how does this park make money? It has big billboards (banner ads) a branded trampoline (product placement), and a shop selling t-shirts (virtual goods) and VIP queue jumps (boosts or energy).

At a paid park you make the most money by spending lots on telling everyone that you have the best show on earth behind the fence and then charging lots of money for a ticket. At the free park you make most money by having lots of visitors all looking at the many adverts and branded trampolines, but also buying from the shop. It's a big balancing act between the cost of the park, how appealing the rides are, the number of billboards, the number of visitors, how expensive the shop is and how you get people in there without pissing them off.

Online worlds in the same vein as Sony's Free Realms will likely become more commonplace in the post-free world

WHAT HAPPENS NEXT

Paid parks have been doing and perfecting their thing for over 30 years, but free parks have only been around for four years since the land became cheap (Facebook and mobile app stores) and shops could open (microtransactions).

> ***"The free model has been robustly proven. It does well where it can be applied – at the moment mostly web and mobile – and it will continue to do so."***

What happens next in my story is going to be the best bit. The paid parks have been watching how the free parks have shops and encourage their visitors to bring along their friends and they like it. *Infinity Blade* Park opened up with a shop. It means even the fence jumpers could spend money. Meanwhile Rockstar Games opened parks with social clubs.

Elsewhere, the free parks have been looking at the paid parks' rides and so parks like the *Quake Live* Park opened. They want the big rides to sit next to the shop and queue jumps and the billboards and the trampoline. It's all a bit awkward now, but they're working it out.

On top of this further land owners are allowing parks to be free – Sony just set up the *Free Realms* Park – so there will be more and more of them. Soon almost all of the land will be free parks interspersed with big-ticketed mega-parks, which the free parks will forever struggle to compete with for glitz and glamour.

All of this is interesting not because of the fences or the ticket booths – or lack of them – but what's going on inside.

Although we're an industry obsessed with numbers and stats, we should spend less time seeking proof of the already proven and starting looking for and making exceptions to the rules: Games that do free – or paid – in new ways. Our industry has been given a rebirth nobody expected.

Let's stop figuring out the inception date and boasting the birth weight and start thinking about what they'll grow up to be. I want them to be an astronaut.

And that's why next month I'll be asking the important question: "Are games art?"

Just kidding.

Will Luton is creative director at the award-winning boutique studio Mobile Pie. They create delicious own IP and work on licenses, with a partner list that includes the BBC, Orange and Hewlett-Packard. Follow Will on Twitter at @will_luton, or visit **www.mobilepie.com**

MONTREAL INTERNATIONAL GAME SUMMIT

1,500 people expected at Canada's industry event; 80 experts due to offer talks

1,500 attendees are expected at the summit

On the 1st and 2nd November, the eighth Montreal International Game Summit 2011 will take place at The Hilton Montreal Bonaventure Hotel.

Dedicated to professionals of the video game industry in Canada and on the East Coast, MIGS will have 80 experts from all around world offering talks within the six main disciplines: arts and VFX, audio, business, design, production and technology. 1,500 people are expected to attend.

According to the event organisers: "It is aimed at developing and promoting skills and knowledge and encouraging communication between all actors of the industry."

Speakers include Naughty Dog lead game designer Richard Lemarchand, presenting his keynote 'Finding the way of Uncharted: A creative commentary', on the same day as the release of Drake's Deception. Uber Entertainment art director Chandana

THE MONTH AHEAD

A look at what october has in store for the industry and beyond

OCTOBER 7th
Rage. Quake studio id takes us to a post-apocalyptic future in this first-person shooter.

OCTOBER 14th
Pro Evolution Soccer 2012. Time to get angered by unjust results again.

OCTOBER 14th
World Egg Day. Celebrating the egg, whether it is poached, fried, boiled, scrambled, or raw.

OCTOBER 15th
World Handwashing Day. To "shine a spotlight on the state of handwashing in every country."

OCTOBER 16th
World Food Day. Raising awareness of poverty and rising food prices affecting developing countries around the world, highlighting solutions and encouraging aid efforts to those in need.

OCTOBER 21st
Batman: Arkham City. Batman Returns (see what we did there), in this sequel to the popular Arkham Asylum by Rocksteady Studios.

OCTOBER 21st
The Sims 3: Pets is the 5th expansion which may or may not be adding domesticated animals.

OCTOBER 26th
Games Media Awards. Games journalists come together to win prizes… and drink.

OCTOBER 26th
GameCity6. Annual Nottingham festival focusing on videogame culture. Since 2006 they have had pub quizzes, lego animation, world premieres and over 3,000 zombies.

OCTOBER 28th
London MCM Expo. The UK's consumer entertainment show offers a mix of movie, TV, video games, anime, manga and comics.

OCTOBER 28th
Battlefield 3. Big guns, bigger explosions in this Call of Duty challenger.

OCTOBER 31st
Halloween. Giving treats to children but not getting arrested for it.

MIGS is aimed at developing and promoting skills and knowledge

Ekanayake will be giving a session on marketing and PR for indie developers, and former EA Montreal general manager Alain Tascan will also be speaking at the event in the wake of opening a new transmedia studio in Montreal named Sava.

As well as conferences there will be opportunities for networking and discovering new trends, with the organisers setting up a business lounge, career fair, contests and parties.

"MIGS has two main qualities on which we focus year after year," says event director Marie Claude Bernard *(right)*. "First and foremost, it is an international event on a human scale. With 1,500 expected attendees it is all the more easy to network and connect with friends and new contacts alike.

"The other distinctive aspect of MIGS is how its program focuses on the main disciplines of the industry rather than types of games or console. Along with its advisory board led by Jason Della Rocca, the organisers pay special attention to including talks related to indie game development as much as console, triple-A games; speakers from big studios as much as academics; inspirational talks as much as hands-on sessions."

Registration for the event can be filled in on the website and prices range from $300 to $680 for Alliance Numerique members and anywhere between $5 and $860 for non-members depending on which parts of the event you want to see and with how many people. Business lounge fees range from $1,100 to $2,365 depending on membership and $800 to $1,025 for additional delegates, up to three persons max.

http://sijm.ca/2011

DEVELOP DIARY

Your complete games development event calendar for the months ahead

NORTH EAST OF NORTH 2011
November 5th to 13th
Dundee, Scotland
www.northeastofnorth.com

The seven-day international digital arts festival North East of North will feature moving image, performance, music and technology driven arts.

Taking place in Dundee between the 5th and 13th November, NEoN exchanges knowledge in areas such as new business models, digital developments and latest production techniques. It will deliver a programme of talks, workshops, exhibitions, commissions, screenings, performance and more at many of Dundee's cultural, business and public spaces.

This year's festival theme is 'collaboration and legacy' with a 'distinct Nordic flavour'.

OCTOBER 2011

SOUTHERN INTERACTIVE ENTERTAINMENT & GAME EXPO
October 7th to 9th
Atlanta, GA, USA
www.siegecon.net/SIEGE2011/

INTEL DEVELOPER EVENING
October 12th
Swar Bar, London
www.develop-online.net

GAMES MEDIA AWARDS 2011
October 26th
Vinopolis, London
www.intentmedia.co.uk

GAMECITY
October 25th to 29th
Nottingham, UK
www.gamecity.org

GAMES FOR BRANDS
October 27th
London, UK
gamesforbrands.com

LONDON MCM EXPO
October 28th to 30th
ExCeL, London
www.londonexpo.com

NOVEMBER 2011

MONTREAL INTERNATIONAL GAME SUMMIT
November 1st to 2nd
The Hilton Bonaventure Hotel, Montreal
sijm.ca/2011/

NEON DIGITAL ARTS FESTIVAL
November 5th to 13th
Dundee, UK
www.northeastofnorth.com

G-STAR 2011
November 10th to 13th
Busan, Korea
www.gstar.or.kr

LONDON GAMES CONFERENCE 2011
November 10th
London, UK
www.londongamesfestival.co.uk

FUTURE GAMING AND DIGITAL CONFERENCE
November 16th
Birmingham, UK
futuregaming.bsp-a.com

DEVELOP LIVERPOOL
November 24th
Liverpool, UK
liverpool.develop-conference.com

DECEMBER 2011

EVOLVE LONDON
December 1st
London, UK
www.evolveconference.com

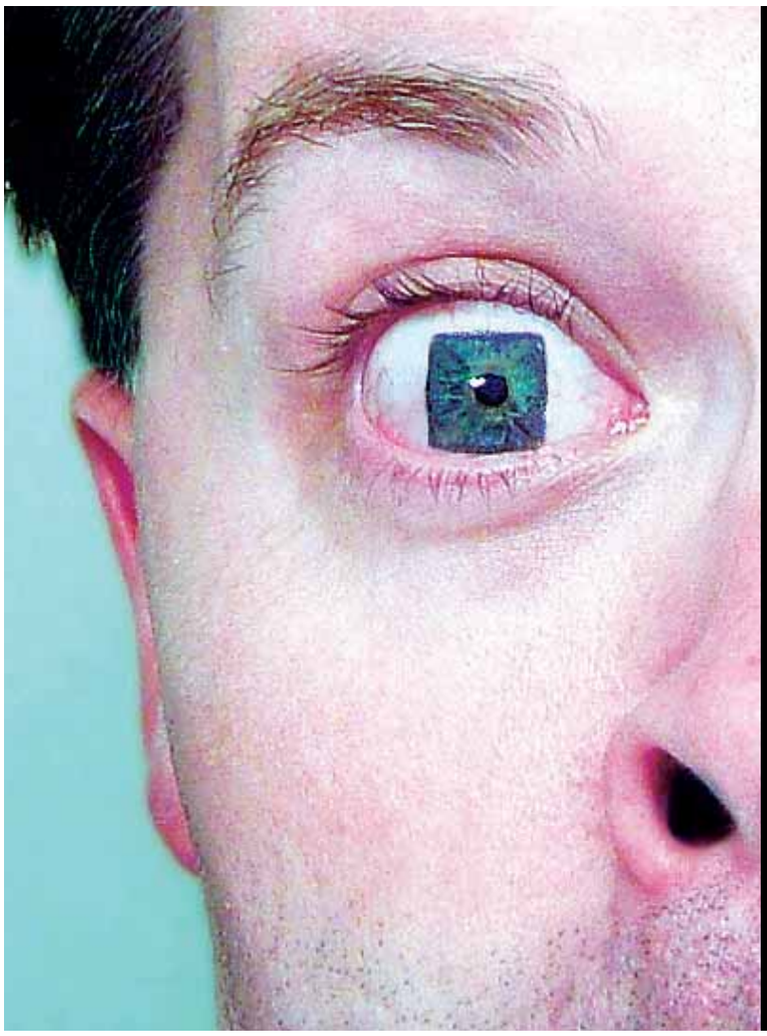
GAME CONNECTION EUROPE 2011
December 6th to 8th
Paris, France
www.game-connection.com

MARCH 2012

GAME DEVELOPERS CONFERENCE
March 5th to 9th
San Francisco, USA
www.gdconf.com

JUNE 2012

E3 EXPO
June 5th to 7th
Convention Centre, Los Angeles
www.e3expo.com



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JAGEX HIRES THE BEST:

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- Game Engine Developers
- Lead Tool Developers
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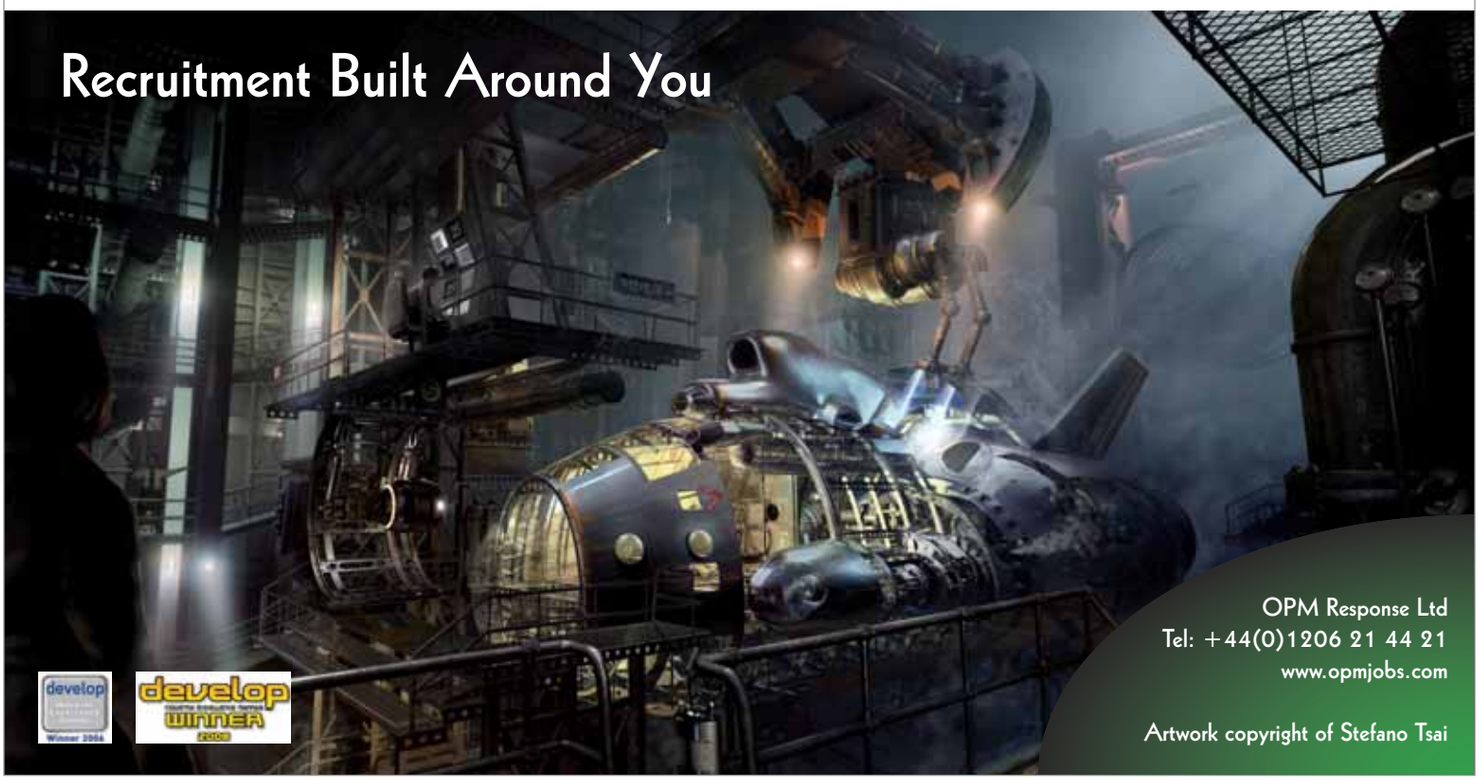

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INDIE PROFILE

'The best era yet for independents'

In the third of a series looking at some of the most exciting real UK indies making PC titles, **Will Freeman** turns his attention to Plain Sight studio Beatnik Games

Beatnik Games
Founded: 2008
Headcount: Six core staff, six contractors
Based: London
www.beatnikgames.com

ESTABLISHED in 2008, young property development tycoon Damien Cerri set up Beatnik with a vision that game development would be easy.

The studio then rose to fame in 2010 with the release of its PC action game *Plain Sight*.

The central London studio quickly built the confidence and reputation needed to instate itself in the indie hall of fame, having learned Cerri's initial optimism may have been misplaced.

As a result, current CEO Sherif Aziz is optimistic about today's indie scene.

"We do think it's probably one of the best times in gaming history to be an indie," says Aziz. "However, the competition is fierce, which is good and bad. Good because it drives the quality of games up; bad because if you do need funding to get a new project off the ground it can be difficult."

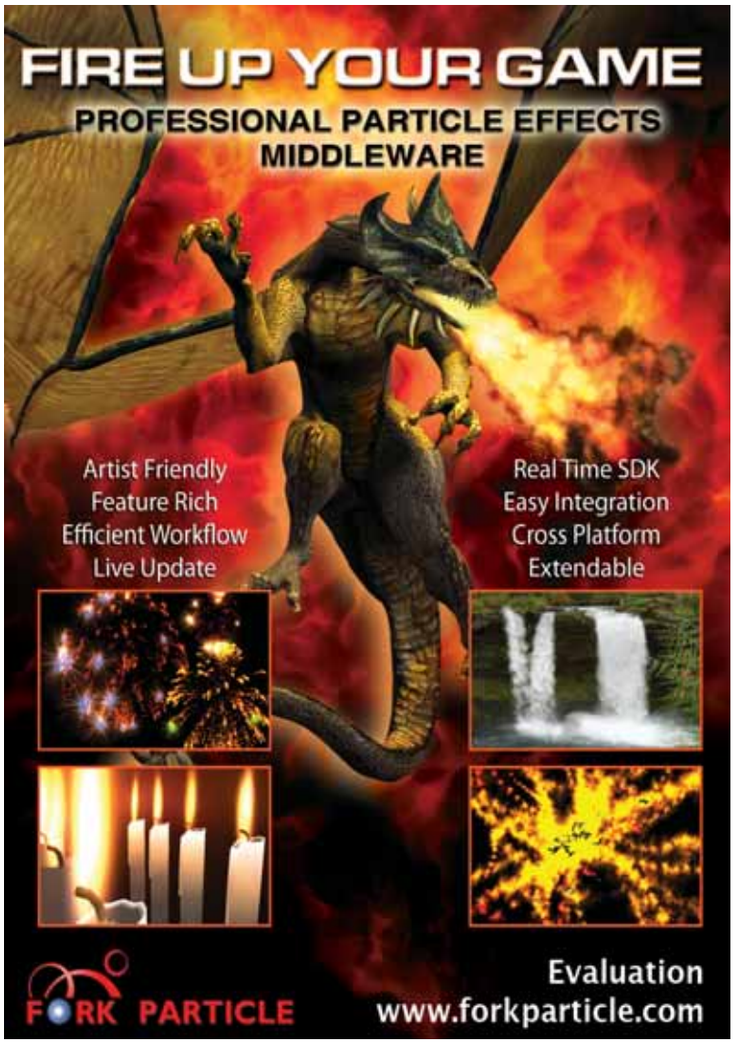
Despite those challenges, the democratisation of technology through tools provided by the likes of as Unity, UDK and Havok has allowed Aziz and his contemporaries to build sustainable businesses around IPs that scream indie spirit.

"I also think initiatives such as Indie City and other crowdfunding sites will play an interesting role in the future of indie games," says Aziz of the current indie sector. "Fans and the community get interesting projects off the ground – it's definitely an exciting time to be an indie."

And despite work underway including an iOS title and a cross-platform Vita project, Beatnik remains besotted by the PC as a platform for exciting indie games.

"I think the PC will always be the best gaming machine on the planet. Whatever consoles can do a PC can do better and almost every household has one," offers Aziz. "Digital distribution makes getting content to users easy and cost effective. Also, you're not at the mercy of the platform holder which can all but kill a small indie studio."

Beatnik Games CEO Sherif Aziz (above) believes it's one of the best times in gaming history to be an indie studio



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– David Lee Swenson, Sr. Graphics Engineer, Maxis

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BETA

DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

"What happened at Realtime Worlds is not a Scottish problem."
Sean Taylor, Denki, p34

Region Focus: Scotland
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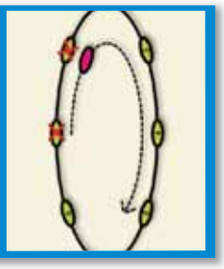
A new model for game planning
p40



Easy money?

With so many options for generating revenue without charging upfront for your creation, is there a one-size-fits-all solution to keep your studio in profit? p24

Smart money

Free-to-play has emerged as a dominant method for generating revenue from digital games, but it is only the beginning of new ways to make money. **Will Freeman** takes a look at the future of monetisation

Games Analytics CEO Chris Wright (top) and SponsorPay director of marketing Projjol Banerjea (above) talk about money making models for games

GONE ARE the days when the free-to-play, pay-to-progress business model marked a bold new frontier for game developers.

Today it is very much a norm in the mobile and online spaces, and revenue generation through in-game transactions is an established way to turn a newly releaed product into a breadwinner. Releases such as *Tiny Tower*, meanwhile, have proved that free-to-play games can charm the tech industries' trendsetting hegemony. And according to market research firm Distimo, while only four per cent of titles in the iOS App Store feature an in-app purchasing business model, 72 per cent of revenue generated in that market comes from consumers paying for in-app items.

The waters of free-to-play have not completely settled, however. While different payment platforms and new monetisation mechanics jostle for developer's attention, free has a long way to go in the console space, and in-game advertising models still offer viable alternatives.

Distribution platforms like Steam, OnLive and Facebook all have their own proprietary systems for making cash from digital content, while the average selling price of games on app stores is tumbling.

SERVICE AND DELIVER

"Free-to-play is a very innovative model but is really the first step in a line of finding interesting ways of monetising games," says Games Analytics CEO Chris Wright. "People like to be given the choice on how to play and what to spend money on. As games become increasingly service based it will be the service that is valuable, game developers will need to entertain their customers and build games that they want."

That considered, studios hoping to thrive will also need to respect players, giving them a range of options and incentivising them to keep playing. Aggressive monetisation seen in compulsion loop games like *Tiny Tower* can be off-putting to many players, and rigid in-game purchasing mechanics can limit the credibility and creativity of even the most well-intended titles.

That need to remain flexible may see hybrid models emerge combining elements from subscription, freemium and upfront payment approaches, meaning there is still plenty of life in the traditional 'premium model'.

"Free-to-play with in-app-purchasing is here to stay, but success lies in the balancing and the implementation of details that increase player retention and morale at a time where many publishers ravage their respective communities by monetising too aggressively," suggests Michael Schade, CEO of *Galaxy on Fire 2 HD* studio Fishlabs.

"Personally, I feel that premium won't go away anytime soon," he adds. "In my opinion it is more than a mere business model, but a core feature that differentiates your product from the vast majority of free-to-play titles."

> ***"Success lies in balancing morale when many publishers ravage their communities by monetising too aggressively."***
>
> Michael Schade, Fishlabs

Despite this, Schade concedes that it will be necessary to look for ways to redefine the premium proposition in the future.

"So far, the term premium has been strongly associated with the pay-per-download model," says the Fishlabs boss. "But for the future it might also make sense to look outside the box and combine the premium model with certain aspects of the current free-to-play market."

BAD VIBRATIONS

Other developments in the space seek to improve the conventional free-to-play model by reducing the friction of in-game purchases. BoxPAY is a company committed to the idea that enabling mobile phone payments will define the future of free.

"One-touch billing, and in-app billing are some of the most exciting developments on the horizon, and you can already see it happening on the Android platform," insists BoxPAY co-founder Iain McConnon , who believes that one-click billing must replace SMS pin entry as a payment option for mobile.

"This makes the integration into the gamer user-experience almost seamless and will most certainly increase transactions and generate more revenue," he claims.

Certainly, with the proliferation of mobile phone ownership in some of the games industry's most promising emerging markets, solutions like that provided by BoxPAY become increasingly interesting.

Another consideration is that of the long-predicted advent of platform convergence. As the power of mobile and tablet devices knocks on the door of home consoles, and publishers of boxed games scramble to reinvent their business models, revenue models that straddle devices may emerge as the most dominant in the near future.

"A cross-platform approach to monetisation is one that we believe is – and will be – of increasing importance and have chosen to adopt ourselves," says Projjol Banerjea, director of marketing at SponsorPay, which offers an advertising solution for the monetisation of premium

EVE Online's subscription model has been hugely successful and it is now expanding to mobile and console

FINANCIAL ADVISER

Unsure how to optimise your game's non-traditional revenues? Fishlab's **Michael Schade** has some advice

The onus of revenue generation still falls on games developers, despite the current range of payment service providers and monetisation models on offer these days.

That means a delicate balancing of creativity and business nous, and the confidence to contradict the most popular business models.

"Think of ways to reach out to as many players as possible and how to convert non-paying members of your community into paying members over time," offers Fishlabs CEO Michael Schade. "But also think different.

"Free-to-play with in-app-purchase might not be an equally successful solution for all developers alike. Before you blindly copy your competitor's business model, your team should take the time to analyse your IPs and evaluate their chances on the market."

Schade suggests that in certain cases it might even make sense to do the opposite of what your competition does.

"Take Fishlabs, for example. Despite the fact that most other titles are either released in the 99 cent category right away or leave the premium price range rather quickly, we have been able to offer *Galaxy on Fire 2* on the App Store for $9.99 over a period of almost one year. And the game is still very popular and gaining good profits."

Free, it would seem, is far from the be all and end all of new game monetisation models.

There are now a plethora of options for developers to establish their own in-game currency

content or virtual currency. "Our goal is to make our services both easily accessible and convenient to use for our customers, regardless of domain, platform or device."

Certainly, services like SponsorPay's and BoxPAY's, which offer something a bit different from the typical free-to-play model, have huge potential to adapt to a world where console games generate revenue without relying exclusively on the point-of-purchase model.

That convergence could even trigger a global standardisation of payment methods, technologies and models, as developers working on multiple platforms need a system that is workable regardless of the different OS's. As titles like CCP's *EVE Online* expand to mobile and console, there is little doubt payment solution providers need to act fast to prevent the foundation of massively complex business models that have the potential to bewilder the consumer and developer alike.

NEW MONEY

The transition to these new methods of making money is already testing traditional developers and publishers, who have to compete with the runaway success of more youthful, agile studios such as Zynga and Mojang Specifications. The latter of which has made a fortune from charging an upfront fee for an unfinished product.

There are challenges too, however, for the new school of digital content developers, who are all faced with walking the hair-thin line of balanced in-game monetisation.

"The technology that allows such steps forward can also have potential difficulties," warns Jonathan Mabey of ecommerce platform holder Gate2Shop. "In a way, innovations take care of themselves, because that's creative and human nature.

"However, the payment technology has to work in the end, and that needs constant attention, especially risk management and fraud prevention. We need to find the balance between the best flexibility for a player, while maintaining the prudence and security expected from us by the vendor."

In the wake of widely reported events like the PSN hacking scandal that shook consumer confidence, the issues Mabey touches on are increasingly important, not least because the developers themselves can become as much a victim as the consumers.

"We advise our customers to make sure they don't internalise sensitive processes like storing payment data," offers Martin Ott, chief executive of payment system and digital wallet specialist Skrill. "The recent attacks have highlighted that a lot of hackers target gaming companies in particular, due to their active large databases. While developers and publishers can't really stop themselves from being targeted they can make sure that hackers come out empty handed."

And, if that weren't enough to worry about, there is also the significant matter of

Tiny Tower has successfully implemented the free-to-play model adding payment incentives for quicker construction

consumer fraud, and before that, the very real problem of making any money at all.

ATTENTION SEEKERS

"One of the biggest challenges of the free-to-play model in games is the lack of initial investment from the user resulting in high attrition," asserts Banerjea.

"When paired with the vast number of options available in the market, it presents a formidable challenge to developers and publishers who are consistently battling to either secure user attention or to retain it. The big hurdle is to secure sufficiently high investment from the user – either monetary or temporal or emotional, or a combination of these – to prevent him or her from moving on to another game."

Yet despite the challenges, the potential is huge. As new platforms and models emerge, the market today may be unrecognisable in the next decade.

As the kinds of games played evolves, so does the way those games make money. If there is a general consensus between those at the heart of the payments sector and the developers looking at new ways of generating profits, it is that diversity and flexibility is key. The more ways to pay and play means a far greater opportunity for success, both critically and commercially.

IS FREE EVIL?

Mobile Pie creative director and Develop columnist **Will Luton** on free's moral compass

"It's often suggested that running a profitable virtual currency game is about employing clandestine physiological tricks to extract money from players – that they're nothing more than a Skinner Box with credit card details.

"Coming from product game developers this is hypocrisy. Games have always been judged on their ability to encourage return play, from the arcades to the 100-plus hour RPG. We as an industry have, intentionally or otherwise, evolved to build complex systems of effort and reward which, like a film, a book or any other artwork, invoke emotions that keep us engaged with them. When they don't do that, they have failed.

"What virtual currency and freemium models change is who pays and how much they pay. No longer is everyone splashing £40 for games that they don't finish. Instead the deal is that the game is free forever, but you can progress a lot quicker or get a nice hat if you pay a few quid. The game is the marketing for the virtual currency product.

"The big fans who play and love the game, pay big bucks and bring more players to the party. Those that think your games suck, leave with a full wallet. If those paying players are fully aware of their spend and aren't children, that seems a better deal for all."

CREDITS WHERE THEY'RE DUE

What do Facebook Credits mean for new game payment models?

When Facebook made its 'Credits' virtual currency mandatory for developers in July, it proved a controversial decision.

Ultimately, it guaranteed Facebook 30 per cent of all the revenues of the games that offered the likes of microtransactions on the all-powerful social network.

What's more, it muscled out proprietary or external payment systems.

Still, the revenue split is more generous than that offered by OnLive which takes a 40 per cent cut, and provides studios with a payment backend maintained by one of the world's largest and most established online outfits. It also arguably encourages players who have the universal Facebook Credits in their wallet to look to games beyond the chart-toppers produced by Zynga and its closest rivals.

Facebook insists that its Credits have been conceived to help developers generate revenue and allow them to focus their energy on creating games.

"With over 1,000 games and apps and over 500 developers globally using Facebook Credits, they provide the easiest way for people to buy virtual goods and services on Facebook," a spokesperson for the social networking giant told *Develop*. "Credits provide people with a familiar and consistent payment experience and a trusted place to store payment information."

Kobojo now courts the attention of more than four million monthly active users and has raised around $7.75 million.

The social network is today investing in new ways to pay for and earn Credits, giving developers additional methods to increase their revenue and become successful in the online space.

"This means developers can focus on what they do best – building great games and applications," insisted the spokesperson.

Facebook Credits certainly have their fans in the developer community. French studio Kobojo has seen a 20 per cent revenue increase after implementing Facebook Credits across its games *Pyramidville*, *Goobox* and *RobotZ* among others. The developer now courts the attention of more than four million monthly active users and has made around $7.75 million to date. That success, according to Facebook, is a reflection of the potential of its Credits system.

BOXPAY

BoxPAY is a global company whose platform offers video game developers a self-service mobile payments solution, which promises to deliver a user friendly experience to those that adopt it.

"We offer game developers the ability to charge customers for digital goods, currency, and content through their mobile phone bill, instead of a credit card," explains BoxPAY co-founder Iain McConnon.

"To begin billing using BoxPAY, a developer simply has to copy the code we provide into their webpage. This creates a payment widget which customers can use to purchase items using only a mobile phone."

Game developers can sign-up to BoxPAY and begin billing their global customer base on the same day. Consumers, meanwhile, only require ten seconds to complete a transaction, and the only information a user has to provide is a mobile phone number.

"BoxPAY has taken mobile billing a step further and opened up this technology to the masses," insists McConnon of its potential.

Presented as a democratic solution available to almost any developer active in today's games industry, the BoxPAY platform also offers in-depth reporting and analytics, where a developer can track its transactions in real-time.

www.boxpay.com

SPONSORPAY

SponsorPay provides developers with an alternative solution to monetising through 'traditional' micropayments. In essence, its technology delivers an advertising solution for revenue generation via premium content or virtual currency.

"We enable users of social networks, virtual worlds, mobile apps as well as online games and services to earn virtual currency or access to premium content through participation in targeted advertising offers," says Sponsorpay's Director of Marketing Projjol Banerjea.

The most significant difference between SponsorPay's approach and that of its contemporaries is that the company's products are targeted at non-paying users, such as those customers who are reluctant to part with real money for virtual goods or premium services.

"We make it possible for publishers to monetise these users who form the dominant percentage of their customer base – usually between 90 and 98 per cent for the average freemium approach – and convert them to paying users," reveals Banerjea about its advantages.

SponsorPay's latest product BrandEngage allows the presentation of targeted video and interactive content within the game environment and has been designed to improve user engagement.

www.sponsorpay.com

SKRILL

As one of Europe's largest online payment systems providers, Skrill is also among the world's largest independent digital wallet providers, and has more than twenty million account holders.

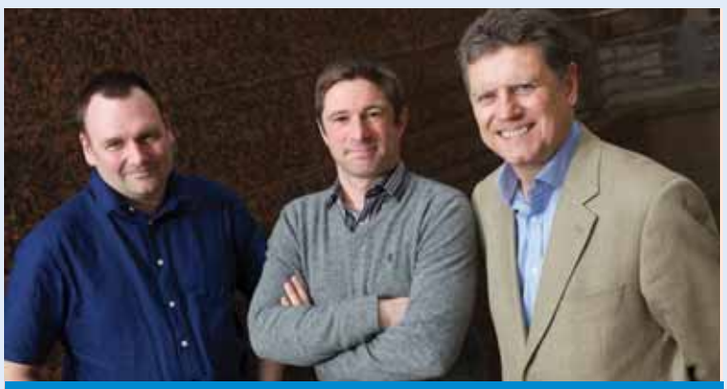
"The digital wallet enables any customer to make online payments conveniently and securely without revealing personal financial data, as well as send and receive money online cost-effectively simply by using an email address," says chief executive Martin Ott.

Skrill's worldwide payment network offers businesses access to direct payment processing via over 100 payment options in more than 200 countries and territories through just one integration. That, says its creators, brings a clear time and cost-saving advantage to all merchants wishing to expand their operations throughout the world.

"Our global payment options and the simple one-contract-one-shop integration have been cited as the main reason why a lot of our biggest gaming customers switch from their existing payment providers," suggests Ott.

Skrill, which recently secured a deal with *MineCraft* outfit Mojang Specifications, also believes its platform is as applicable to smaller studios looking to widen their global reach as it is for large-scale operations with a wealth of experience.

www.moneybookers.com



GAMES ANALYTICS

While not a payment platform provider, Games Analytics still offers a service that could prove extremely useful to those exploring new ways of generating revenues for them games without adopting the traditional model of payment at initial point of purchase.

In effect it is a complete analytics platform that allows web, social, mobile and online PC developers and publishers to understand player behaviour through data driven insight. Games Analytics purports to improve player satisfaction, revenue, retention and virality.

"We collect and analyse millions of data events within each game to allow games publishers to make informed decisions that will optimise the success of their online games," explains Games Analytics CEO Chris Wright. "We also use a number of techniques including behavioural segmentation and predictive modelling to get a much better understanding of how players are using the game on an individual player basis. The key is to treat players as unique individuals and not look at the mass as an amorphous lump."

The company believes its sweet spot is the free-to-play model, which it says has the best opportunity to monetise the player and many interesting ways of interacting with the playing community.

www.gamesanalytics.com

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Great Scots

Despite the high-profile problems suffered at Realtime Worlds, Scotland remains one of the globe's most resilient game development hubs, as **Will Freeman** discovers

Douglas (left) and Richard Hare (right) of Outplay Entertainment meet with Scotland's First Minister Alex Salmond

It's impossible to think of the recent history of the Scottish games industry without pondering what happened at Realtime Worlds.

But to judge the nation's game development sector based purely on the large scale collapse of a single studio is grossly unfair. If those at the top of some of Scotland's most proactive studios are to be believed, there's rarely been a better time to make games in the country.

And, say the studio heads most ingrained in the Scottish dev scene, it is the region's diversity that is its strength.

"I don't believe one studio model or development method typifies Scotland," says Sean Taylor, producer at Denki, which has made games in the area for 11 years.

"I think it's very easy to conclude that 'Scotland equals Rockstar North plus loads of wee studios in Dundee cranking out mobile games.'"

But that not only ignores the sustained success of handheld developers like Firebrand Games in Glasgow, and also the interesting directions people like Hunted Cow with their web games, and Veemee, who work on Playstation Home."

In fact, Denki's home town of Dundee alone is host to a wealth of diverse and varied game developers. 4J Studios is currently at work there porting *Minecraft* to Xbox 360, not far from the offices of the likes of eeGeo, Ruffian and Tag Games; all of them very different studios working on utterly distinct projects.

THE SPICE OF LIFE

"Scotland has studios serving every possible platform or outlet for interactive entertainment from lone developers on small-scale Flash games to large companies working on high-end console titles," offers Outplay Entertainment co-founder Richard Hare, who with his brother Douglas is building what could become one of Scotland's largest studios.

> ***"Scotland is encountering the same issues and opportunities faced by developers from all around the world."***
>
> Richard Hare, Outplay

"There's no doubt that the gaming landscape has changed dramatically in recent years with the emergence of social networks, extremely capable mobile devices, tablets, and their associated app marketplaces.

"Scotland is encountering the same issues and opportunities faced by developers from all around the world in that we all need make sure we're selling what people, whether they are consumers of publishers, are buying."

In that turbulent marketplace, Scottish educators including those at the globally recognised University of Abertay are noticing an encouraging trend. Scotland has become a hotbed of new start-ups established by ambitious development young guns.

"The Scottish games industry is thriving," offers Abertay professor Dr Louis Natanson. "That's particularly as new opportunities open up with direct digital distribution for iOS and Android, as well as gaming on Facebook and other social networks. The shift we've particularly noticed is our most exceptional students now talk about how they're going to start their own business, and why they want to stay in Dundee to do just that."

Until recently the country's reputation was as a console development stronghold – after all, Scotland is the original home of *GTA*. Times are changing, though, and today it is becoming home to an increasing number of mobile studios.

"Now Dundee has a huge variety of studios working on console, mobile, social, TV and many other platforms, from single person start-ups to established medium sized studios we have it all," says Paul Farley, CEO of mobile specialist and Dundee stalwart Tag Games.

"In the last year there has been an explosion in the amount of microstudios," adds Colin Riley, games technology director of tools outfit and compiler specialist Codeplay. "That being said, you still have the

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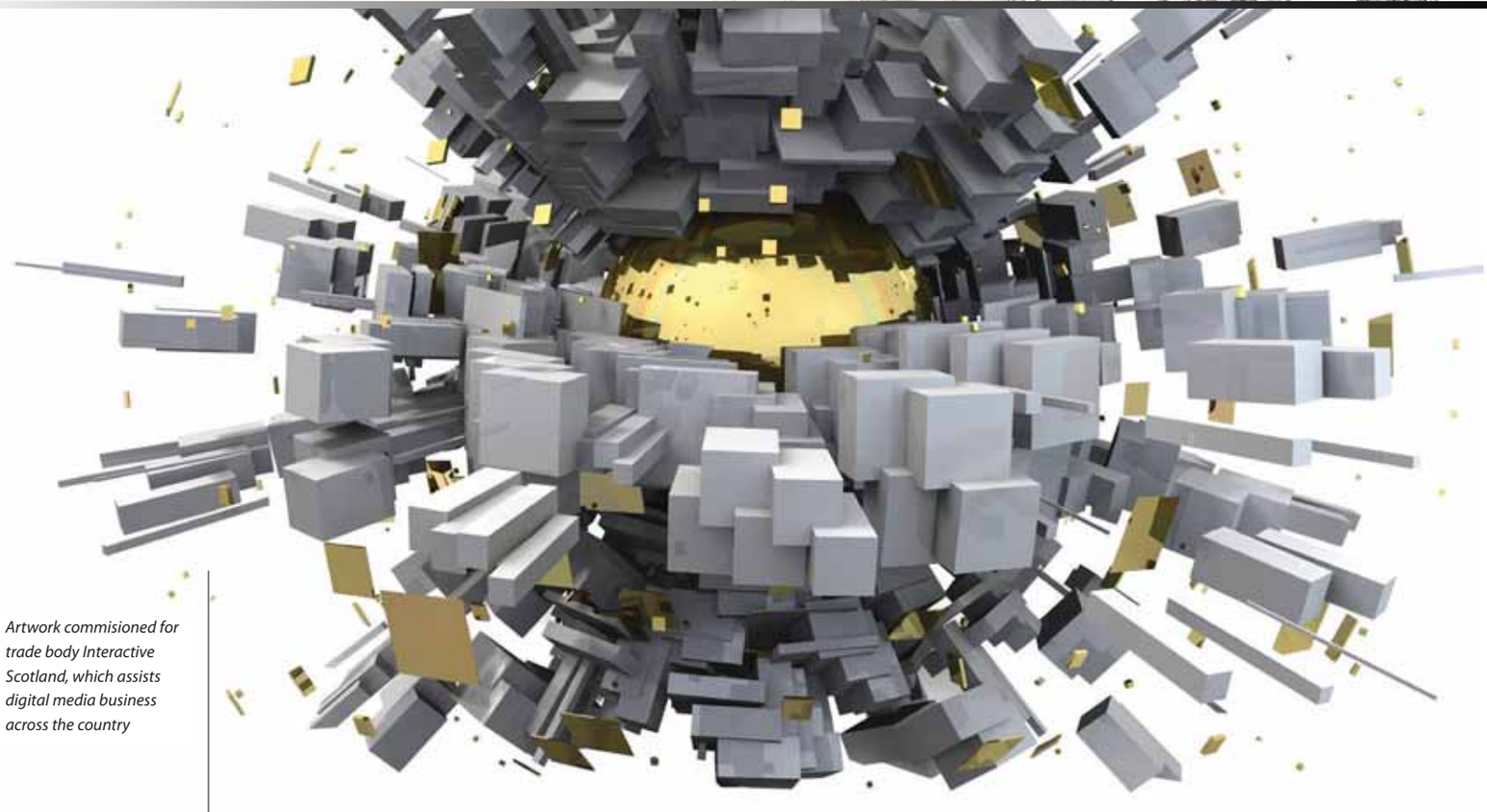

Artwork commisioned for trade body Interactive Scotland, which assists digital media business across the country

likes of Rockstar North, Ruffian, Proper and Firebrand developing big-name games. There is currently quite a nice mix, and social is becoming a larger part of it with new players Outplay and eeGeo appearing."

If nothing else, the Scottish industry has proven its ability to quickly adapt to changes in the games market.

COMMUNITY MATTERS

Ask anyone employed in the Scottish games industry, however, and they will tell you Scotland's developers are collectively capable than much more than diversity of specialty and studio model.

Of late the new IGDA chapter in Scotland has been welcoming upwards of 100 visitors to its events, and the University of Abertay's famous Dare to be Digital talent contest has become a recognised launch pad for success in the games industry. The sense of community there is intense, and in the eyes of the Scottish Government the industry is recognised as hugely important.

"We are a proper community and we tend not to close ourselves off from each other," states former Cohort man and current head of Gamify Consultancy Lol Scragg.

> ***"There seems to be fewer people departing the Scottish industry to the other game hotspots around the world which is great."***
>
> Richard Scott, Axis Animation

"We can lend each other staff and we always support each other. We do get great support here in Dundee specifically from Scottish Enterprise which provides access to grant funding and advice."

"The IGDA Scottish chapter has recently had a resurgence due to Hazel McKendrick and Kraig Walker, two students well known to game developers, and has had fantastic turnouts," adds Codeplay's Riley on the matter. "I was invited to speak at their events along with other Scottish industry figures. The social aspect in Edinburgh has got a boost after Alex Waterston of Haiku Interactive and myself decided to have a meet up which has transformed into @GameDevEd, and it gets quite a large amount of people meeting up for chats and game-related banter bi-weekly."

The emergence of the IGDA in Scotland has made it far easier for aspiring developers to connect with Scottish studios, meaning more than in other hubs, getting noticed in the country is – relatively speaking – an achievable task.

Community is something everyone in Scotland seems keen to highlight, but there is equal passion to talk about another local trait; resilience.

UK Government minister for universities and science David Willets meets Proper Games CEO Paddy Sinclair (below) at Abertay

PROPER GENEROUS

The University of Abertay's links with the Scottish games industry don't stop with games development courses and contests like Dare to be Digital.

The institution also offers grants to developers in the country looking for a leg-up as they establish their reputation and build a business. Just last month Abertay's Prototype Fund provided Proper Games with a £25,000 cash injection; a significant enough act to see it announced by UK Government minister for universities and science, David Willets.

"I feel very proud of how our company has grown over the last few years and I relish such opportunities to tell our story and showcase the quality of work that our talented team are producing," said Paddy Sinclair, CEO of Proper Games. "Receiving confirmation of the Prototype Fund investment from Abertay University is really great news and we look forward to getting this project underway."

Providing a launch pad for studios looking to flesh out new concepts, Abertay's Prototype Fund was conceived to support youthful creative companies demonstrating high-growth potential. The ultimate goal of the fund is to better position the likes of developers to attract additional investment and establish projects underway. **prototypefund.abertay.ac.uk**

Prototype Fund

Prototype grant funding for small businesses and startups

Grants of up to £25,000 are available for Small or Medium Enterprises (SMEs) based in the UK who wish to prototype their own intellectual property (IP). We support games projects and other forms of interactive digital content, such as e-learning, visualisation, interactive exhibits, online, film / broadcast media, or middleware etc. The smaller and younger you are as a company the greater the benefit we can bring and the greater the likelihood of success with your application.

Companies able to work in Dundee are eligible to use the prototyping studio located at Abertay University, where industry-standard equipment and software will be made available. Other locations around the UK are also eligible, either through partnership with a local institution, or through use of your own premises.

Paid work experience for graduates

Abertay University are offering paid work experience for recent graduates, from any UK university, on commercial projects based at sites all around the UK.

These opportunities are available as a result of our Prototype Fund, which provides grants of £25,000 to small firms and other interactive digital development companies to build a prototype of their own intellectual property. One aspect of our funding is that we aim to support companies which are able to provide positions for talented graduates on their grant-funded projects, so that work experience can be gained from a commercial environment by working alongside a professional team.

A range of positions and projects are available, both here at our own Prototyping Studio in Dundee (which provides free hosting for grant recipients), and elsewhere in the UK at partner institutions or on companies' own premises.

Apply now or contact us for more information

Application information and further details are available on our website:
prototypefund.abertay.ac.uk

If you have any questions regarding the Prototype Fund or if you would like to receive information regarding upcoming and future funding rounds, then please send an email with your details to:
prototypefund@abertay.ac.uk

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Institute of Arts, Media & Computer Games

"The Scots are resilient, and throughout the recent tough times we have seen the demise of studios in Scotland, some high profile and some not so," confirms Richard Scott, managing director, executive producer and founder of Axis Animation, the company behind the infamous Dead Island trailer.

"The one thing that always seems to happen though is that from those studios closing other studios spring up quickly with new business models and new levels of determination. There seems to be fewer people departing the Scottish industry to the other game hotspots around the world which is great to see, people want to be successful in Scotland."

And with resilience comes the courage to experiment; something the wider Scottish Government is famed for, which apparently filters down to the games industry.

"Certainly the Scottish scene encourages experimentation in the interactive arena," says Outplay's Douglas Hare. "The close-knit community also provides good support for new ventures, as well the government assistance and relationships with the universities. All of this provides a great canvas for developers located in Scotland."

WELL SCHOOLED

If there is one area where Scotland's development industry shines most, it must be its games education. Abertay stakes a claim to crafting the world's first game development university course, and remains one of the world's most acclaimed sources for specifically trained talent.

"One very fortunate thing about Scotland is that we have universities like Abertay, Glasgow Caledonian and the University of the West of Scotland, and they're producing some fantastic talent," says Andy Cambell, founder and CEO of SpecialMove, a recruiter based in Scotland with a global reach.

"Local companies have been able to build long-term relationships with the universities to ensure that the students leave very work ready. The students are recognised as being highly skilled and highly desirable. We can only hope here in Scotland that those students choose to stay."

Almost every games company based in Scotland can count Abertay graduates amongst its staff, and praise for the institute – along with some of its contemporaries – is absolutely unanimous.

"The University of Abertay Dundee is leading the way with its industry-focused courses, and Duncan of Jordanstone is one of the UKs top art schools," asserts Alan Dobson, business development officer at Dundee City Council. "Abertay have created Dare to be Digital and Dare Protoplay, whilst Dundee College has state of the art digital media facilities. The Prototype fund is here also supporting new developments from The University of Abertay Dundee."

> ***"Companies have been able to build long-term relationships with the universities to ensure the students leave work ready."***
>
> Paul Farley, Tag Games

As a result, says Outplay's Douglas Hare, Scotland is a fantastic location for aspiring developers to establish themselves.

"In addition to world-class game-related courses, many companies offer summer internships – we pay as well – and on-going work experience placements," he says. "There are various competitions, most notably Dare to be Digital, which can help propel talented teams and individuals into the limelight and there are numerous companies hiring at any given time looking to give graduates their first break into the industry."

The recruitment fair Game In Scotland, which is held in Dundee each year, is a further boon for both raw talent and headcount hungry studios, and is well attended by both.

"It's a great place for aspiring developers and has a good mix of studio needing talent," states Codeplay's Riley. "This year's event even had a mod team on the floor asking for volunteers, which is a fantastic way of building up portfolios and was my own entry into the industry."

"In terms of attracting existing talent from further afield, Scotland always has studios on the rise and they're always looking to secure some great talent," adds SpecialMove's Campbell. "That means it's always liquid here. There's a continual flow to recruitment here. It's a very good for finding work and finding talent."

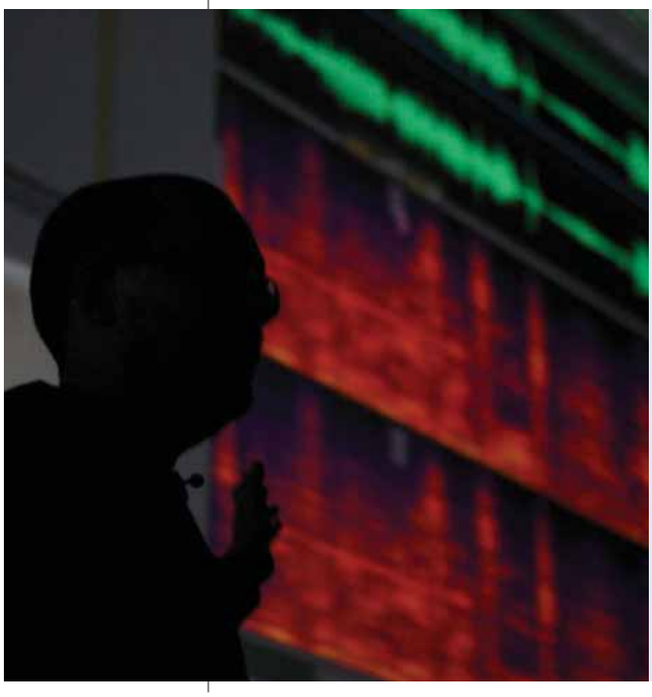
New companies like Outplay Entertainment, which has ambitious plans underway to build a studio that over a course of a two or three-year period hopes to employ about 120 people, typifies the kind of opportunities blossoming in today's Scottish games development sector.

DUNDEE CALLING

What's more, game development flourishes across Scotland, with studios in Glasgow, Edinburgh and Aberdeen blooming. However, it is Dundee that remains the nation's most productive industry hub.

"Given the amazing gaming culture and hub that exists here there is nowhere else in Scotland that makes as much sense for a games studio than Dundee," claims Tag Games' Farley. "Not only do we have the historical legacy of the first generation of games companies such as DMA, Vis and Visual Science; you have a wide range of present day benefits."

There's no doubt Dundee has a rich heritage in video games, and a distinct



A speaker on stage at the increasingly influencial NEoN digital arts festival, which includes numerous games elements

BRIGHT MINDS

Along with Edinburgh Interactive, the NEoN Digital Arts Festival has become one of Scotland's most noteworthy games industry-relevant events.

Taking place in Dundee – a city considered by many as the Scottish gaming capital – this November, it brings together professionals who work with moving image, performance, music and technology-driven arts.

"NEoN is an important date in the UK calendar as its location involves all the companies at the heart of Scotland's gaming community, attending and showcasing what Scotland has to offer," says Dundee City Council business development officer Alan Dobson.

"It offers attendees the chance to connect with international trendsetters and listen to talks from the worlds leading industry movers and shakers. Attending provides workshops and talks relevant to the sector, as well as great networking opportunities and connections to peers.

NEoN attempts to provide a forum for the exchange of knowledge in areas such as new business models, digital developments and the latest production techniques. It celebrates on the notion that art, digital media and gaming can come together to explore new collaborations and open up new and exciting projects, and, insists Dobson, it's not a typical conference.

"The festival element ensures that participants have a really memorable experience whilst in Dundee, as well as learning, business opportunities and networking," says Dobson. "And not forgetting, there's the games air poker night event."

NEoN 2011 takes place from November 5th to 13th at venues and public spaces across Dundee.

www.northeastofnorth.com

blend of development companies perhaps without parallel in Europe.

"We are now in position where there is an eclectic community of companies working within different markets. We also have innovative companies here entering markets ahead of the curve that are always growing, and producing great games on a number of platforms," offers Dundee City Council's Dobson.

POWERS THAT BE

Scottish game developers are also the benefactors of a progressive government attitude, and the support of a number of high profile trade bodies.

Outplay Entertainment was even party to a visit by Scotland's First Minister Alex Salmond, who tops a system of organisations that are open-minded to the benefits of playing host to a games industry that brings in more than £30 million every year to the country's economy.

"To make the most of this opportunity, it's important that Scottish Enterprise helps existing home grown games companies realise their ambitious growth plans and encourages more companies to invest in Scotland," says Joyce Matthew, account manager at Scottish Enterprise, which serves as the main economic development agency in the UK's most northerly nation.

"It's our job to highlight Scotland's global reputation as a key player within the games industry – a key player that boasts the talent, infrastructure and skills to deliver success – and to create the right environment for the sector to continue thriving."

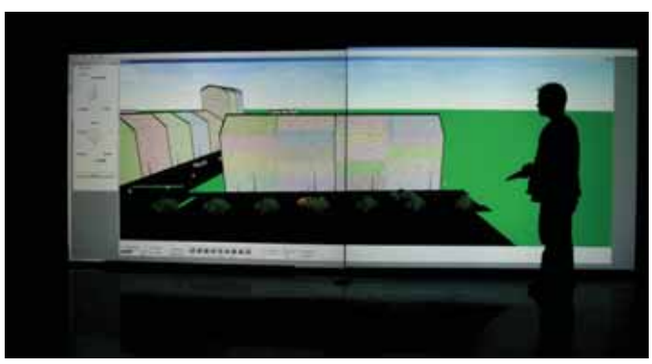
Scottish Enterprise has identified the creative industries – including digital media and games – as a source of huge potential for the Scottish economy. The organisation offers a range of services, including support for those looking to attend trade shows, and financial and non-financial help for local game companies of every kind.

Certainly, Scotland's game companies seem that their potential is well recognised by at a government level.

"I think there is high awareness of the industry and what it contributes to the economy and how it sends a message worldwide," offers Axis Animations' Scott. "We have had some very positive conversations with national government recently and a lot of that is fuelled by the level of non UK work we are doing, the government are keen to see exports and the games industry can really deliver there."

> ***"We have innovative companies entering markets ahead of the curve that are always growing, and producing great games."***
>
> Alan Dobson, Dundee Council

Organisations like Codeplay also talk of a positive experience with government and trade bodies, having secured grants from Scottish Enterprise, Scottish Development International and the European Commission. Tiga's presence in Scotland has also been a great help, and the country's stand at GDC organised by SDI has proved a great cost-effective way of having a base at GDC.



"The Scottish games industry has long been good at supporting itself," claims SpecialMove's Campbell. "Bodies like Scottish Development International, Scottish Enterprise and Tayside Interactive have all been great at supporting the local games companies, and they really do care passionately that there as an industry sector employing staff here."

Scotland's games industry is full of positivity, and there's a strong sense that the country has emerged from a challenging time stronger and more confident.

The last word, then, goes to one of Scoptland's longest serving games companies, Denki.

"The entire landscape of the industry has changed beyond all recognition over the past few years and I think the next couple of years will see a continuation of this," says Denki producer Taylor.

"The challenge facing each Scottish developer is to find their place in this evolving industry, then to continually prove their relevance. I'm very excited to see what exactly these shifts are and how Denki and other Scottish developers react to them."

The University of Abertay (top) and its Hive 3D computing suite (above)

In association with:
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THE REALITY OF REALTIME

Was Realtime Worlds' demise a moment that typifies the Scottish games sector, on an exceptional case? Scotland's industry insiders have their say

"What happened at Realtime Worlds is not a Scottish problem but an industry-wide one. The list of studios with the continued capability to fund, develop and deliver truly triple-A titles is shrinking all the time."

Sean Taylor,
Producer, Denki

"I think the circumstances and the outcome of that story are very much exceptional relative to the industry at large, let alone the Scottish industry."

Douglas Hare,
Co-Founder, Outplay Entertainment

"What happened was very much an exception – Realtime Worlds was a symptom of the changing landscape, from big games on console and PC through to much lighter development for handheld, mobile and social gaming platforms. "

Dr Louis Natanson,
University of Abertay

"Realtime Worlds is an exceptional case. Of course, Scotland has seen its various low points with studios going under. However, Realtime Worlds had a high-risk project and it didn't work out. What's really exciting is the amount of companies appearing from the ashes of these studios."

Colin Riley,
Games Technology Director,
Codeplay

"Realtime Worlds was indeed an exceptional case, built inside a $100m bubble of unreality. Whilst its demise serves as a humbling lesson to us all, it had very little in common with the structure, products, business models and process you see at most of the Scottish studios."

Paul Farley,
CEO, Tag Games

"The decline of Realtime Worlds was a sad story for the UK industry and of course Dundee as they where based here, but the sector has gone through a number of cycles before. We believe with the talent pull, skills and infrastructure this sector will survive and evidence of this has been shown by the number of new spin outs and start-ups created from the ashes of Realtime Worlds"

Alan Dobson,
Business Development Officer,
Dundee City Council

"As far as I am aware, no other independent Scottish developers have taken that level of investment so I think I am safe in saying it was an exceptional case. Unfortunately the ramifications of their decline does seem to be used a fair bit when games and Scotland are mentioned, especially by the local and national press who don't seem that interested in the successful and growing independent studios we have up here."

Lol Scragg,
Founder, Gamify Consultancy

CONTACT BOOK

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URL: www.axisanimation.com

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OTHER USEFUL CONTACTS:

Dundee City Council:
www.dundeecity.gov.uk

Interactive Tayside:
www.interactivetayside.com

NEoN Digital Arts Festival:
www.northeastofnorth.com

Scottish Development International:
www.sdi.co.uk

Scottish Enterprise:
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DUNDEE
ONE CITY, MANY DISCOVERIES

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Education, education, education

Blurring the boundaries between education and employment is the key to a world beating UK games industry, argues **Dr Louis Natanson** of University of Abertay, and Scotland is leading the way

Abertay University, the home of Dare to be Digital and the world's first computer games degrees

WHEN THE chairman of Google warns that the UK is 'throwing away your great computer heritage' it's time to sit up and take notice.

Eric Schmidt is right. Education from school level through to university needs to embrace both art and computer science, and create graduates with a thorough understanding of how different subject areas overlap and interact.

Scotland has a great example of how to do this, benefiting both the game development industry and aspiring students. At Abertay University, the home of Dare to be Digital, we do things differently. Artists and programmers work together to create games; not dry coursework assignments.

Our industry, and the economy, need graduates who are productive from day one in a business. That might be someone else's company – or their own.

SKILLS FOR THE FUTURE

The excellent Livingstone-Hope 'Next Gen' review set out what the UK needs for its video games and visual effects industries to lead the world. A key recommendation is to roll out Abertay's Dare to be Digital model of workplace simulation nationwide.

Why this works so well is that it blurs the boundaries of traditional education and on-the-job training. Our approach to education is a living, breathing thing that is constantly evolving as we work with industry to meet changing skills needs.

It all started with DMA Design legends David Jones and Russell Kay approaching Abertay University in the '90s, arguing that Dundee's emergence as a major force in computer games needed a bigger talent pool to thrive. After *Lemmings* and *Grand Theft Auto*, it was clear Dundee had talent. It just needed more.

As the world's first computer games degrees, Abertay's courses were always intended to be different: a mix of tough academic standards, a focus on hard maths and physics, and an introduction to the challenges of working life, where artists, audio engineers and programmers need to collaborate harmoniously.

It may sound obvious, but this industry-focused education remains rare.

DARE TO BE DIFFERENT

Why is the Dare to be Digital model of education so different? Why are Dare contestants and Abertay graduates such a keen target for recruitment?

> ***"What we've seen from years of students going straight into the industry is this approach works brilliantly. Everyone benefits."***

First and foremost, their real-world experience sets them apart. Too much education is focused just on a single subject. Implicit throughout our educational system is the idea that subjects are distinct, and that art is therefore separate from maths and physics.

What the game development industry and the economy need is the complete opposite of this, as Google's boss says.

Dare to be Digital distils a production cycle down to just nine weeks, pushing student teams to deliver fully playable game prototypes to a fixed deadline.

Their prototypes then go on display to the public, engaging students with user testing and the simple commercial truth that great ideas aren't always great business. The audience must be thrilled, excited and engaged to buy your product.

Our Professional Masters degree takes this idea one step further – scaling up the Dare experience to a full year. Tutors act as mentor and business client, setting commercial briefs. The teams manage themselves, just as if they were running a small studio.

What we've seen from years of students going straight into the industry is this approach works brilliantly. Everyone benefits.

THE NEXT STEPS

Research firm Gartner predicts that global spending on games software and hardware will jump from $67 billion in 2010 to $112 billion in 2015. How can the UK take more than its fair share of that massive increase?

Skills are central to this, alongside cultivating a more entrepreneurial culture, improving the tax environment, and increasing access to angel investors and venture capital right across Britain – not just in the south of England.

Engaging education right across the age range is critical. Schools in the UK have lost touch with our computer heritage – proficiency in Word and Excel will not make us world leaders again. But David Braben's admirable Raspberry Pi project to bring USB-sized computers into schools could.

Access at home and at school to ZX Spectrums from Dundee's Timex factory, along with an after-school club, launched two of the biggest game franchises the world has seen – *Lemmings* and *Grand Theft Auto*. Just imagine what bringing programmable, portable computer to every schoolchild could do.

Dr Louis Natanson leads computer games education at Abertay University.
www.abertay.ac.uk

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Pop stars

Will Freeman takes a look behind the doors of PopCap's European HQ in Dublin, and meets the staff earning their right to autonomy in the wake of the recent EA acquisition

PopCap's hip Dublin office houses a constantly growing workforce, current over 80 in number

PopCap Dublin's studio general manager Paul Breslin (top) and senior game designer Dave Bishop are confident the EA acquisition is a good thing for the company

DESPITE WORKING for six years on what might be the most famous casual gaming IPs in the world, the inner workings of PopCap's Dublin still studio remain something of a mystery.

In the heart of a city that also plays home to Google and Facebook offices, the European headquarters of the company behind giant brands like *Peggle*, *Bejeweled* and *Plants Vs Zombies* houses an ever-growing workforce. But little is known of the creative culture, people and practices at the outfit recently acquired as part of an EA deal worth a reported $1 billion.

In Dublin some 80 PopCap employees – half of whom are from outside of Ireland – are busily adapting existing properties and crafting original titles. Three months ago they were 50 in number, and by 2012 their ranks will have swelled to over 100.

AUTONOMY FOR THE PEOPLE

In fact, so successful is PopCap Dublin as a studio, that it has now earned itself a significant degree of independence from the Seattle base that is the company's global HQ. As well as developing games, the office on Ireland's east coast has its own localisation department, PR team, and all the other elements that allow it to operate as a self-sufficient studio.

"The studio here is younger than the Seattle studio, so we do look to it for a few things, such as to source any technical knowledge we may not have here," says Dublin studio general manager Paul Breslin. "But then we are very much autonomous in that we have our own teams and specific game projects, and these teams work fairly autonomously, occasionally reaching out to Seattle for any knowledge sharing."

> ***"We are very much autonomous – we have our own teams and specific game projects, occasionally reaching out to Seattle for any knowledge sharing"***
>
> Paul Breslin, PopCap

Part of the reason for that independence is PopCap Dublin's track record with regard to its specialty: smartphone development. While the studio isn't restricted to portable devices, its efforts on mobile are what affords the outfit its self-determination, says senior game designer Dave Bishop.

"We've earned our freedom from Seattle over the last couple of years," he asserts. "If you looked back two years ago, here we were adapting PopCap games for mobile. That was really the focus of this studio, and then they made the decision that they effectively wanted to create 'PopCap in a box' here in Dublin, so that we could have some creative and developmental autonomy."

For that reason the studio opted to install someone creatively who could be an opposite number to the key creative team in Seattle, picking Bishop for the role.

And it seems that they have succeeded in building that studio in a box. On a recent visit to Ireland, EA's infamous CEO John Riccitiello declared PopCap Dublin 'a company in it's own right'. With the new boss suitably impressed, the Dublin team are clearly doing something striking.

While the PopCap Shanghai operation is more autonomous, the Dublin base has still begun to blossom into being one of the most significant and influential casual studios on the planet.

Part of the reason, argues Breslin, is an increased focus on game design.

IT'S IN THE GAMES

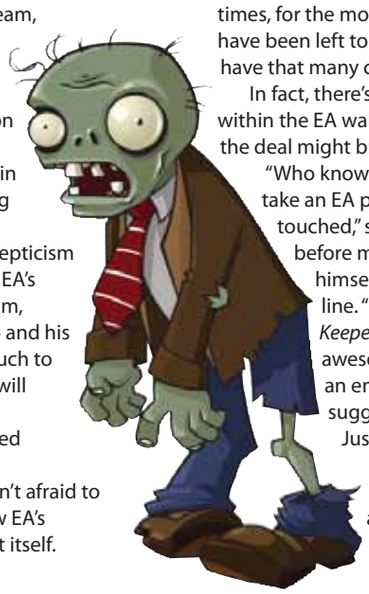
"We've got a number of designers here, and that's evolved over the past few years," he explains. "We now have three very strong designers on board, and that has changed our ability to create new IP and new IP adaptations. Around those individuals we're building teams to create games."

But what of PopCap's sometimes controversial new owners? It would be reasonable to assume that with Electronic Arts now at the helm, the waters of autonomy at PopCap Dublin could be upset just as they are settling.

The studio's staff, however, are confident EA's role can only be beneficial.

"The company culture won't be changed, and that PopCap magic is part of our culture," offers Breslin. "None of that will be touched. But what does change is that EA gives us the ability to accelerate our plans to get our games into more people's hands. There's 8,000 people at EA, and EAi, which we're a division of, has a very good distribution capability. We can now tap into that distribution network and get more of our games out there."

Physically, the EA acquisition will have very little effect on PopCap Dublin. The team will remain in their current building, and for the foreseeable future are unlikely to find themselves sharing space with EA's Irish Bioware operation. EA's capacity to localise into huge numbers of languages will be a significant boon to the team, and the giant publisher's experience with platforms that PopCap has only really touched on such as Android is something that has Breslin and his colleagues feeling clearly optimistic.



But there was some scepticism from PopCap staff about EA's influence. The Dublin team, however, insist Riccitiello and his colleagues have done much to reassure them that they will keep a hold on creative freedom and the cherished company culture.

Bishop, for example, isn't afraid to admit he wasn't sure how EA's influence would manifest itself.

"I'd known lots of people at Bullfrog and lots of people at Westwood," he says. "But I think this is a different EA to that era. Riccitiello and everybody else like Barry Cottle went to great lengths, sometimes in person, to emphasise that PopCap was being bought because of what it is and how it does things; they're not just buying the rights to some brands.

> ***"Riccitiello went to great lengths, sometimes in person, to emphasise that PopCap was being bought because of what it is and how it does things."***
>
> Dave Bishop, PopCap

"I take Riccitiello at his word, and I know people at Playfish, and it seems that in recent times, for the most part, EA's acquisitions have been left to be who they are. I don't have that many concerns."

In fact, there's even personal excitement within the EA walls about the opportunities the deal might bring about.

"Who knows; one day we might want to take an EA property that no one else has touched," says Bishop with a smile, before making clear he's allowing himself to stray from the company line. "I would love to do *Dungeon Keeper* on iPad. That would be awesome. Maybe one day I'll send an email to Mr Riccitiello and suggest it. Never say never."

Just nine months ago PopCap's biggest challenge was where to go next. Ideas and ambitions were plentiful, but to take on everything at once was close to impossible. Today, on the shoulders of EA, that is no longer an issue, insist the senior staff.

Globally the company – which once spent three months working on the speed the gems fall in *Bejeweled* – is preparing for significant and rapid growth.

SETTING UP POPCAMP

PopCap's creative approach is a bold one. It will not be hurried when it comes to making games, and it is famously not afraid to try new ideas and can them if they don't work.

That approach is very much part of the studio's success, but it does mean staff can see themselves working on a project for many years. That considered, PopCamp has been created to serve as a 'creative release'.

The quarterly PopCamp events see staff step away from their usual roles and work in small teams to create games internally in a week-long game design challenge.

> ***"Everyone is concentrating on making really fun, working on games that give an idea of where it could go."***

The project is partly for fun, partly to inspire creativity, and potentially to see future fully fledged PopCap releases conceived.

"Typically when we're working on a proper PopCap game everything is really polished, but when it comes to PopCamp everything is really immediate," explains artist Riana McKeith (*above*). "You don't have time to polish to such an extent, because everyone is concentrating on making really fun, working games that give an idea of where it could go. Art-wise that really gives me an opportunity to take a chance and do things a bit mad."

"PopCamp means that new IP can now come from anywhere," adds Dublin studio general manager Paul Breslin. "We're open to working on the ideas that start there and see them bubble up all the way if they have the potential."

MORE IS MORE

Inspired by a belief that the more they deliver, the more autonomy they'll enjoy, the Dublin staff are creating higher numbers of games for a wider range of devices than ever before, and are focusing intently on 'social connectedness' as they build their reputation as PopCap's centre for excellence in smartphone.

"We want to do more here in Dublin," concludes Breslin. "We want to create more games and we're now nicely set up to do that. We have a number of teams working on both new titles and adaptations of our existing IPs right now. We've just got a new floor here we're going to open up, and we'll be hiring people to fill that space and create more games. We're very ambitious and the road ahead is there for us to make full use of."

www.popcap.com

Inside stories

Taking a break from finishing off International Racing Squirrels, **Rob Davis** introduces the concept of 'wireframe narratives'

Rob Davis of Playniac, the studio behind the Channel 4 commisioned International Racing Squirrels

AS AN EMERGING expert in the world of racing rodents, I spoke recently at Develop and GDC Europe 2011 about Playniac's approach to preparing squirrels for international competition, and found that there was plenty of interest in the techniques we were developing.

We introduced what I call 'interactive wireframes' for *International Racing Squirrels*, a game commissioned by Channel 4 which launches in autumn 2011. Other game designers are already talking about applying them, and students want to employ them in their coursework.

The interactive wireframe really helped the commissioning team at Channel 4 visualise and understand the game, the mechanic and the user journeys that Playniac was building. Even at a very early stage, the broadcaster's staff could take away a sence of how things would work once the game had been completed.

So what are interactive wireframes, how do they differ from previous ways of specifying games, and how can developers use them in 'storytelling mode' to do very early user testing?

THE DISTANT PAST: USE CASES

We started off using use-cases and applied them in various productions including *Lost Army of FuShi*, an action puzzle game for BBC Bitesize; and *Alien Farm*, a multi-user, collaborative, alien herding game for CBBC. For each element in the game, the use-case explains in writing a user's intentions, the action they will take and the results.

Use-cases look like a handy tool for detailing game features, but we found that in practice they quickly became large documents that were difficult to maintain. They are painstaking to write and, worst of all, no one really wants to read them. Though excellent at specifying functionality very precisely, they leave little room to manoeuvre in game implementation.

The main issue was that they didn't give a sense of what the game was like to play or how the game's graphical user interface (GUI) might be laid out, so we decided we needed to find a more visual technique.

THE RECENT PAST: STATIC WIREFRAMES

Many readers will be familiar with wireframes, and we have used them for projects such as *Journey to Fossil Island*, an ecological adventure quiz game we created working with British Gas.

This was an episodic game, with missions for release over several weeks, and the wireframe diagrams above show the map view screen. The game features six island locations that the player visits in turn, and this wireframe could be created before any of the locations had been designed or even named. The wireframe makes the functionality clear and also hints at the possible layout of the information on the screen, without pinning it down.

In the images immediately above you can see a static wireframe from *Journey to Fossil Island*, and how the finished map screen appeared in the game.

Static wireframes give an immediate visual sense of the layout of game screens and their functionality. They also allow some GUI design to be done early in the project and in an abstract manner, and are very easy to understand for both technical and non-technical readers.

They are useful for communicating the game to everyone involved and the design and development teams will use them to take the game forward.

> ***"So many queries can be resolved by referring to the interactive wireframe that in some senses it can seem as if the game is producing itself."***

They are not intended, however, to convey any design for the finished screens, even if occasionally they do include some graphical elements for conciseness. Being diagrammatic, neither do they convey look and feel or colour schemes.

Overall we found that, although supporting user flow diagrams can help, the approach did not give a good sense of screen flow and user interaction.

For our next game we decided to take wireframes one step further.

THE FUTURE: WIREFRAME NARRATIVES

International Racing Squirrels is a race team management simulation that has the player running a team of jet-setting squirrels. They train their squirrels to boost their stats and upgrade them with accessories from a shop, before sending them to race up mountains, across deserts or through futuristic cityscapes. Behind the gameplay, we've turned the finances found in games from *Sim City* to *Game Dev Story* up a notch, and incorporated a realistic model that simulates real-world consumer finances.

We decided to create an interactive wireframe where all the buttons on screen would be active, although none of the game functionality had been implemented.

We used Adobe Flash CS4, and switched to AS2 mode to enable us to work entirely on the tool's linear timeline using basic instructions, rather than having to write any separate code.

Interactive wireframe screen layouts look quite similar to their static counterparts, but users can mouse over to reveal tooltips showing further information and they can click to advance to different sections of the game. The interactive wireframe was created using Adobe Flash, and delivered to our team and client via a password-protected web page.

One of the main screens in *International Racing Squirrels* is the home screen, where the player gets an overview of their game and can manage their team. They can buy and upgrade homes and training activities, view their stats, pay bills, go to races and more. There was a lot to fit on this screen and the interactive wireframe also shows onscreen items in various states.

Though not usually a feature at the wireframe stage, the diagram on the opposite page does give a sense of the intended setting: the background image was added for this purpose.

The completed screen immediately above brings those features very much into the world of the game, featuring an up-tree urban training facility.

For the main race screen we decided early on that we would not create a first-person racing game but, as in management sims such as *Championship Manager*, we would allow players to set up their team and then watch them perform. We provide some interaction during races in the form of a performance boosting mini-game and various power ups.

The wireframe shows the race position indicator, a loose tribute to *Mario Kart*, the overhead track overview, the 'squirrel cam' showing the team member front-on and the mini-game. Taking us slightly closer to a working prototype, we were able to mock up several versions of the mini-game before deciding on the final form (*below, left*).

Left: The interactive wireframe version of International Racing Squirrel's home screen, and the final version of the same screen in-game (above)

The finished game screen shows all of those features in place. On the right above you can see the Jungle Tree Run race.

Interactive wireframes have all the benefits of their static predecessors and give a clear sense of screen flow. They also give some sense of the game dynamics. They are extremely easy to understand and incredibly useful for the design and development teams as well as the client. So many queries about the game can be resolved by referring to the interactive wireframe that in some senses it can seem as if the game is producing itself.

With some basic Flash knowledge, interactive wireframes are surprisingly easy to maintain once set up. They can also be easily delivered over the web. Although Flash Professional is our preference, a variety of tools could be used including Flash Builder, OmniGraffle, PowerPoint or Keynote; even HTML or interactive PDFs. There are also online offerings such as MockingBird. However in our view they are not as flexible or powerful as Flash for interactivity.

WIREFRAME STORYTELLING

An additional benefit of interactive wireframes is that they can be used for live testing. We found this invaluable to get some sense of the game in action early on. For the first time, we took the interactive wireframe into a very early user test in a London school, where players ran through the entire game and using all of its features. Don't forget that this is a game that doesn't exist yet.

The interactive wireframes were also very helpful for Channel 4 and Playniac's school play-testing because, as we all know, showing people static wireframes just doesn't cut it.

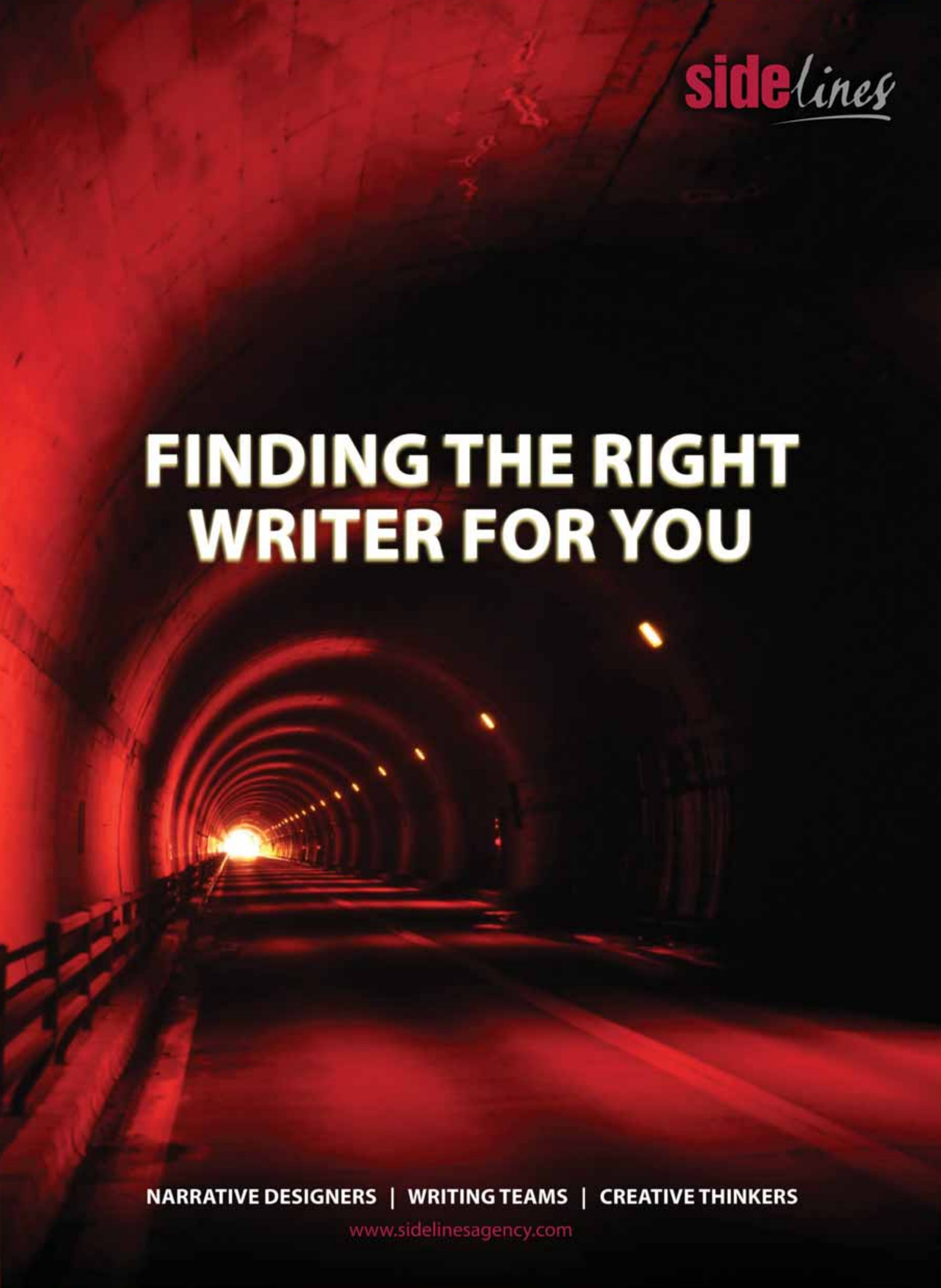
The game is being played in what I'd call 'storytelling' mode. Off camera a 'games master' is playing the part of the software, describing everything that is happening but not immediately viewable on the screen.

The session is videoed and we observe how screens and functionality are understood; and how well intended game mechanics work.

I was asked by a GDC delegate how this approach was useful if it can't convey the excitement or visual experience of playing the actual game, and so runs the risk of alienating the tester. We are not, however, trying to create an entertainment experience at this stage. By asking the participant to suspend their disbelief, allow us to tell them a story and join us in imagining the result, we are simply trying to understand more about our game.

www.playracingsquirrels.com

Rob Davis is founder and creative director of Playniac, the team behind *International Racing Squirrels*, as well as numerous other projects for broadcasters, agencies and brands.
www.playniac.com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Remixing games audio

Firelight Technologies plans to shake up games development with the new FMOD Studio, p44

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Opening the DAW

FMOD Studio is here to bring the digital audio workstation concept closer to games development. **Will Freeman** talks to Firelight Technologies' lead designer Raymond Biggs about a tool poised for what promises to be an industry-changing release

Firelight Technologies lead designer Raymond Biggs believes that for the consumer, FMOD Studio will mean more immersive gaming experiences

What differentiates FMOD Studio from FMOD's previous offerings?
The main difference with FMOD Studio is how we approached the design. We started by looking at the tools currently available for music, film and television – digital audio workstations (DAWs) such as Pro Tools, Logic and Live – and we based our design on the core ideas these tools share. We wanted FMOD Studio to have a similar look and feel but to be tailored specifically for games.

So what about the games audio sector today means that a tool of this kind is needed and wanted?
I believe there's real frustration among sound designers and composers about the tools currently available for game audio. For those coming from music, film and television to games, there's a high barrier to entry because current tools are just too different from the ones they use every day.

Meanwhile, those currently working in the games industry are hamstrung by the lack of features that are standard for DAWs. With FMOD Studio we're trying to bridge the gap between these two worlds.

Presumably that means that FMOD Studio could change the way games audio is implemented in the future?
If you look at how game audio tools are used today, you'll see that mostly they're just used to import and organise assets. Most sound effects in games are simple random playlists, even though our tools provide the ability to make much more dynamic sounds.

I believe a major reason for this is that the interfaces of game audio tools today just aren't designed for audio creation. They have more in common with file managers and databases than audio sequencers and software mixers.

By designing FMOD Studio to be more like a DAW, we believe sound designers and composers will spend more time creating within the tool and experimenting with dynamic sounds and music.

And how will it change the games that consumers play?
Ultimately, we hope FMOD Studio will help create more immersive and engaging games. One unique aspect of game audio that sound designers and composers have to take into account and try to avoid is listener fatigue caused by repetition. If sounds and music are dynamic and ever changing, the player will feel more engaged with the game.

FMOD Studio is designed specifically for creating sound effects and music that have variation and respond dynamically to in-game action. Potentially, every sound effect and music track created with FMOD Studio is its own mini synthesiser.

Why is the virtual mixer element particularly important to FMOD Studio?
The mixer is actually a very important creative tool in any audio production. Creative mixing is really an art in itself and many highly regarded audio engineers get paid big bucks to mix the likes of albums and film soundtracks.

> ***"We believe sound designers and composers will spend more time creating within the tool, experimenting with dynamic sounds and music."***
>
> Raymond Biggs, Firelight

There have been some experiments in the past to bring mixers to games – starting with in-house tools and more recently in middleware. But we haven't seen anything at the level you'd expect from an audio workstation or hardware mixer.

The mixer in FMOD Studio is special because it's the most capable mixer ever created for games. We think it sets the bar for how games will be mixed in the future.

What other significant features and abilities does FMOD Studio introduce beyond the mixer itself?
The other major feature in FMOD Studio is its multi-track editor. It's a unified editor for both sound effects and music that supports flexible track routing, effect chains, automation of effects by the timeline as well as game parameters, and tempo automation for music.

We're also including some long requested features, such as shared workspaces for teams, Perforce integration, mixer snapshots and support for hardware control surfaces.

And it's fair to say FMOD Studio will provide games audio professionals with a parallel to that of film and TV audio?
Our aim is to reduce the learning curve, not just for newcomers but for those already working in the industry with current tools.

If you look at audio tools available outside of games, they are very mature pieces of software that share fundamental design features, conventions and terminology.

But if you look at current audio tools for games, they've got more in common with data entry applications like spreadsheets than with DAWs.

For someone coming from film or television it's a very steep learning curve – and for those currently in games, a lot of time is spent figuring out how to do things in the

The audio mixer element of FMOD Studio brings the production quality of movies and albums to game audio design, claim its creators

In designing FMOD Studio to be more like a DAW, Firelight Technologies hopes sound designers and composers will feel able to spend more time experimenting with dynamic sounds and music.

game audio tool they already know how to do in a DAW.

We've based the design of FMOD Studio on those things common to all DAWs and expanded them to achieve things that are unique to games. If you're already comfortable with DAWs, using FMOD Studio should feel very natural.

Audio teams, of course, work in tandem with game developers specialising in other disciplines. How will FMOD studio improve the interplay between sound teams and the likes of coders, designers and so on?
I think we're seeing a trend, in both internal tools and middleware, of reducing iteration times. The best way to see if something works is to quickly try it – and if it doesn't work, try something else. Accelerating the iteration process for the audio team gives them more time to experiment and collaborate with the art, design, and writing teams.

With FMOD Studio we've actually tried to eliminate iteration time altogether by skipping the build step. Our live update system allows sound designers and composers to make changes on the fly and hear them while the game is being played.

Is FMOD Studio exclusively for triple-A development, or will it offer pricings and a feature set suitable for smaller studios, and even indies and microstudios?
From a design standpoint, we've worked hard to layer the complexity in FMOD Studio. Although there are some advanced features that triple-A titles will exploit, there is a core set of basic features that will be used by projects large and small. We've focused on making these everyday things easy and upfront.

We'll be announcing pricing closer to the release date. However, it will follow our current pricing philosophy of offering the full product to everyone – free for educational and non-profit use, and variably priced for other projects, depending on their size.

> ***"Features like the live update system will allow game sound designers and composers to get content into the game almost instantly."***
>
> Raymond Biggs, Firelight

What challenges still face those working in game audio today?
I think a common fight for all of us in game audio is for bigger budgets. Not just money – although that would help – but for system resources. High quality effects and synthesis used in the film, TV, and music industries are computationally expensive – the algorithms are very complex. For example, a reverb effect of the quality of Waves' IR1 convolution reverb would blow the entire audio CPU budget for most games – and that's just for one effect.

However, we are beginning to see greater value placed on game audio as attention increases from the press and from gamers.

We're also on the verge of the next console cycle with the muscled up Wii U launching next year. It's a very exciting time to be in game audio and I think we're going to be blown away by advances – both technical and artistic – in the next few years.

How important is integration with other tools and technology to FMOD Studio?
It's easy to forget when you've got your head stuck in developing a tool that you're only one stop in a much larger pipeline. FMOD Studio sits between the DAW and the game engine, so anything we can do to improve the flow of content will help speed up the process.

FMOD is already integrated with all the major game engines, and we'll be looking to continue those integrations with FMOD Studio. Additionally, features like the live update system will allow sound designers and composers to get content into the game almost instantly.

In terms of technology we've been lucky to have attracted some really great partners; companies like Dolby, iZotope and Audio Gaming have incredible technology far beyond anything we could do in-house. We know our own limits – and we can rise beyond them by working with great partners.
www.fmod.org

KEY RELEASE

This Month: Will Freeman looks at v3.0 of BigWorld Technology's MMO suite

WHAT IS IT?: A broad middleware offering specifically for making MMOs and online games
COMPANY: BigWorld Technology
PRICE: See website
www.bigworldtech.com

BigWorld's Fantasy Demo (above) is provided to licensees of the company's middleware platform, and shows example code for trading systems, AI, combat and other systems

BigWorld's Matt Daly (above) says World of Warplanes (top) is being integrated with Overwolf to bring social networking, chat and one-click machinima publishing into the game UI

FOR THOSE considering the creation of a new MMO, BigWorld Technology presents a tempting offer.

The result of ten years' work, the tech outfit's middleware platform is designed specifically for developing massively multiplayer and other online games. It provides users with an infamously highly scalable server capable of supporting millions of players, a 3D client that promises to deliver an increasingly robust experience, integrated content creation tools, server tools, mobile and browser integration, a third-party plugin library and a complete support service.

And with a number of new features incorporated in 3.0, BigWorld is set to increase its standing as a prominent player in the competitive middleware space.

"The main areas we're currently focused on are improving shadow and lighting performance in the core DirectX client, extending iOS and web browser integration, a big client facelift, social networking functionality, extended web services for BigWorld Server, and Collada support," says the firm's social media director Matt Daly of the company's plans for the platform.

"In order to open up the field of play to indie developers, we're now also offering offering a BigWorld Indie licence, in addition to the commercial licence," he adds.

SMALL CHANGE?

Perhaps surprisingly, Daly claims that the underlying needs of massively mutliplayer developers have not changed all that drastically over the past decade; albeit with the caveat that the likes of browser, social, mobile and free-to-play have marked important milestones in the evolution of crafting MMOs.

"We've had the BigWorld client in a browser since March of last year, and have seen the browser-integrated game space growing rapidly," confirms Daly. "Online publishers like Bigpoint, Aeria and Perfect World are creating a richer and longer-term social context for gaming experiences with browser-based games.

"Aeria publishes *Realm of the Titans* and *Kingdom Heroes Online*, two games that have benefited from some level of out-of-game social networking connectivity. *World of Warplanes*, another BigWorld-powered title, is integrating Overwolf to bring social networking, chat, one-click machinima publishing, and other such functionality directly into the game UI."

> ***"To open up the field of play to indie developers, we're now also offering offering a BigWorld Indie licence."***
>
> Matt Daly, BigWorld

The impact of social networks on MMOs certainly can't be ignored – especially as they give developers a direct route to extending user engagement to include time not specifically spent in-game.

It's that trend that inspired BigWorld's Web Player, which helps bring MMOs to web browsers, allowing licensees to take their games and players deeper into the realm of social networks.

APPLE IN ITS EYE

BigWorld is also increasing its focus on iOS. While the company has supported mobile for several years, the ongoing rise of iOS has prompted the tech outfit to increase its support for Apple's portables.

As a result, BigWorld currently has a working demo of an iOS client connected to the same server that's running its PC '*Fantasy Demo*', meaning that two users can share the same game space and all data exchange therein while one is on a computer and the other is on an iPhone or iPad.

While the introduction of support for iOS Apps to connect to a BigWorld Server is one of the most substantial updates to 3.0, it is the many more subtle changes that may have more impact on the daily workload of MMO development.

"Besides browser, mobile and Collada integration, we have quite a bit of additional shininess coming to our client in version three," confirms Daly. "We're implementing brand new lighting and shadowing capabilities, including deferred lighting rendering, PSSM, HDR render, SSAO, dynamic shadow maps, and lightmaps. FXAA anti-aliasing is being worked on, as well as soft particles and other similar goodness."

Over on the server side, noteworthy improvements include new components to better support external services like TwistedWeb, as well as asynchronous two-way calls within the server.

Certainly, Bigworld Technology is set to be kept very busy over the next six months as it extends version 2.X and readies 3.0. Fortunately, the efforts of the team at the Australian based company mean that if you're an MMO developer, your workload should be a little more manageable once 3.0 is in the wild.

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EPIC DIARIES

Mark Rein looks at two very different Unreal Engine 3 titles

THE *MASS EFFECT* franchise is a behemoth in video game entertainment; a series that has reshaped the way players think about gaming and its immersive possibilities.

The upcoming third installment, along with its predecessors, is built on Unreal Engine 3.

Mass Effect 3 will feature not only improved environments and enhanced cinematics, but also Kinect integration.

"So much has changed since we began working on this series," say Casey Hudson, executive producer at BioWare Edmonton. "When we began, the Xbox 360 hadn't even come out yet, and yet we had to design a game for it. Now, looking back, we've been working with Unreal Engine 3 for quite a few years. Even with *Mass Effect 3*, we've been able to find huge new improvements to the engine's performance."

PERFORMANCE CAPTURE

And performance is key, according to Hudson. "That's allowed us to do everything from getting much better acting with the characters to introducing better storytelling methods," he explains. "In addition, the engine allowed us to create a richer world and produce more entertaining cinematics. We've also utilised the improved performance of the engine to bring more enemies on screen at once, so players will contend with a lot more stuff happening in this game."

Gameplay has also changed dramatically, says Jesse Houston, producer of *Mass Effect 3*: "If you look at *Mass Effect 1* to *Mass Effect 3*, they're almost completely different games at this point.

"You've seen major changes in combat. You've seen major changes in role-playing elements. You've seen massive lighting changes; now we have real graphic fidelity that is just so much better than it has been historically. You're going to see performance improvements. We're 30 frames per second yet again, locked across the board. You can really feel the difference in the controls.

"We're ultimately an Unreal Engine 3 game, and Unreal Kismet and Unreal Matinee are a major part of any kind of cinematic experience," continues Houston, adding: "Our team has been able to utilise Kismet and Matinee to create Hollywood-style cinematics that bring the story to life and enhance the gameplay experience." *Mass Effect 3* will be released for Xbox 360, PlayStation3 and PC in early 2012.

> ***"We've been working with UE3 for quite a few years. Even with Mass Effect 3, we've been able to find huge new improvements."***
>
> Casey Hudson, Bioware

MINORITY'S REPORT

While Unreal Engine 3 is the choice among many established developers, indie studios like Montreal's Minority also rely on the technology's power.

Minority's upcoming PlayStation Network exclusive, 3D puzzle-platforming adventure *Papo & Yo*, has already snagged impressive critical accolades. These include six awards and 20 award nominations at this year's E3, such as both IGN and GameSpot's Best Puzzle Game of E3. GameSpot stated: "Its deeply personal subject matter, clever implantation of puzzles, and surreal art design combined to make something unique and engaging."

Minority's choice to go with Unreal Engine 3 had to do with not only the team's great track record with the engine but also a need for agility throughout development.

Julien Barnoin, lead engineer at Minority, explains: "We knew Unreal Engine 3 would get us creating gameplay mechanics and levels very quickly. We wanted to quickly start building gameplay elements and puzzles and iterating on them. UE3's material editor allowed us to achieve beautiful characters and environments without a lot of work.

"When artists or designers come to me asking for a new feature, I can often just point them to how to do it right in the editor, and can get back to coding the features that are really unique to our game."

Papo & Yo is scheduled for release on PlayStation Network in 2012.

Mass Effect 3 (above) and Papo & Yo (inset) are two utterly distinct games made with the same game development technology

UPCOMING EPIC ATTENDED EVENTS:

GDC Online
Austin, TX
October 10th to13th

Montreal International Game Summit
Montreal, Quebec
November 1st to 2nd

Please email: ***mrein@epicgames.com*** *for appointments.*

To discuss anything raised in this column or general licensing opportunities for Epic Games' *Unreal* engine, contact: **mrein@epicgames.com**

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Canadian-born **Mark Rein** is vice president and co-founder of Epic Games based in Cary, NC. Epic's Unreal Engine 3 has won *Game Developer* magazine's Best Engine Front Line Award five times along with entry into the Hall of Fame. UE3 has won four consecutive Develop Industry Excellence Awards. Epic is the creator of the mega-hit *Unreal* series of games and the blockbuster *Gears of War* franchise. Follow @MarkRein on Twitter.

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UNITY FOCUS

A look at how Relentless crafted the first Unity-authored Kinect game

AIR BAND
Developer: Relentless Software
Platform: Xbox 360 (Kinect Fun Labs)
What is it? A new music game specifically for Microsoft's Kinect Fun Labs

WHEN Microsoft threw open the doors of the Kinect Fun Labs to developers, the Relentless Software team knew it had to move fast.

Earning a space in the area would give the Brighton studio a chance to engage with consumers through some of its most experimental concepts; an alluring opportunity that would prove equally popular with developers across the globe.

Fortunately, as a company already *au fait* with using Unity as a rapid prototyping tool, Relentless was primed to pounce on the Kinect Fun Labs prospect.

"When we were bidding for the Kinect Fun Labs project we wanted to show we could turn something around quickly, so we used Unity to make a demo – of a similar Kinect Fun Labs-style game – in two weeks with a handful of us," says Tim Aidley, lead programmer of Relentless' Fun Labs game *Air Band*. "This must have made an impression - we started on *Air Band* almost immediately after that."

In short, Unity was an obvious choice for a tight schedule, even though it had not been used to author a released Xbox 360 or Kinect title previously.

"We worked closely with Unity to make sure all the functionality we needed for *Air Band* would be ready in time," states Aidley on the matter of project speed

"This, combined with our own plug-in provided, meant we could achieve the quality we wanted."

BAND TOGETHER

Air Band itself is a music game free from the shackles of scoring, winning or losing, and it demands no musical skill. It's also one of the first games on Xbox 360 to augment the player's image with virtual objects; a factor that is a testament to Unity's potential.

"What impressed all of us most is the level of productivity we can achieve with Unity," says Aidley of the technology's attributes. "The intuitive layout and interface are straight-forward and the online reference manual is also a great feature – it's comprehensive and very accessible.

"Many ready-to-use features cut down the need for what normally takes programming time, like the integrated audio filters. Our audio designer was impressed with the ability to embed audio trigger events into animations, as it was a great way to get audio quickly synced to some of the art elements in the game."

> ***"The team was able to spend more time focusing on the game and less time wrangling with the engine."***
>
> Tim Aidley, Relentless Software

Air Band's game designer, meanwhile, was also particularly impressed by the ability to quickly tweak values and see the results in real time.

"From a production perspective it was incredible to have a team who could be really versatile and adaptable, thanks to what Unity had to offer," confirms Aidley.

But it wasn't just that Unity allowed *Air Band's* artist, audio designer and game designer to add or tweak elements in the game without assistance from a programmer. For the game's all-important audio the engine was particularly useful to set up animation curves that mixed the balance of individual music tracks according to the dynamics of a player's movement, all of which could be quickly modified in the Unity editor.

Relentless Software's Air Band team (top, clockwise from top-left) Paul Grimstone, Tim Aidley, Will Tarratt, Jonathan Wingrove, Mona Quintanilla, Dave Miller and Tim Ansell, and the Kinect Labs Game they created (above)

WELL KINECTED

Looking forward, it's likely we'll see many more Kinect games authored using Unity. The engine now supports most of the Kinect APIs, leaving Relentless most eager to access the ability to connect the motion detecting hardware's input into the Unity editor.

There were, of course, challenges in crafting *Air Band* – Microsoft certification and timing being the most prominent – but despite working on a new platform with an engine yet to be used for Kinect, and having to overcome the problems inherent in trying to blend multiple music stems, Relentless and Unity prevailed.

"Thanks to Unity's strength, the team was able to spend more time focusing on the game and less time wrangling with the engine. Also, the 360 Unity code was very stable," concludes Aidley.

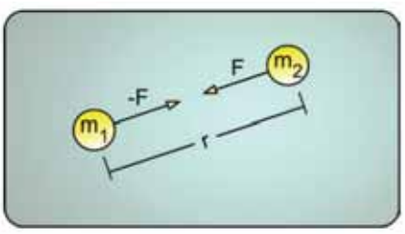
Authors of the book as shown top to bottom: Jason Zink, Matt Pettineo and Jack Hoxley

Particle Systems – Part 2

In our ongoing series of book excerpts, here we present the second part of an extract from Practical Rendering & Computation with Direct 3D 11 by **Jason Zink**, **Matt Pettineo** and **Jack Hoxley**

THIS IS THE second and final part of an extract from Practical Rendering & Computation with Direct 3D 11. Check back with issue 120 for part one.

The particle system we will build in this section represents a particle emitter and consumer, where the emitter creates particles and the consumer destroys them when they get too close to it. The system will be governed by a simple gravity system based around the consumer. This could be thought of as a simplified black hole, which exhibits a large gravitational pull on each particle and will swallow them up once they pass the event horizon. Before moving to the implementation of the particle system, we will examine the basic laws of gravitation in order to implement our particle update method in a physically plausible manner.



Newton's law of universal gravitation states that there is an attractive gravitational force between two point masses, which is proportional to the product of the two masses, and inversely proportional to the square of the distance between them. This relationship is depicted in the diagram above, and is defined in the equation below, where F is the gravitational force, G is the gravitational constant, m1 and m2 are the masses of the two objects, and r is the distance between their centre of mass:

$$F = G\frac{m_1 m_2}{r^2}.$$

According to this relationship, we can see that the closer two objects are to each other, the greater the attractive gravitational force between them becomes. In addition, the more massive the objects are the greater this force is as well. This makes sense when considering a black hole, which represents a singularity of infinitely large mass (this is a simplification, but it will serve as an adequate explanation for our purposes). If an object approaches a black hole, at some point it will be too close to the black hole and will be dragged into it. The acceleration of the particle caused by the gravitational force is calculated with Newton's second law, which is shown in the equation below. The acceleration can be found by dividing the gravitational force by the mass of the object that it is acting on:

> ***If an object approaches a black hole, at some point it will be too close to the black hole and will be dragged into it.***

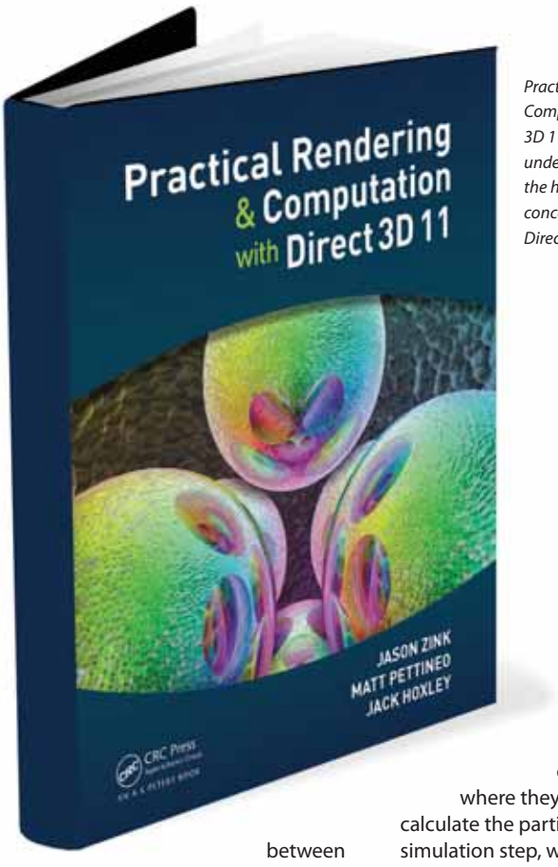
$$F = ma.$$

In the context of our simulation, the black hole will represent a very large mass instead of an infinite mass, due to the obvious calculation issues with using infinite numbers. Each particle will have a fixed mass and will be subjected to the gravitational pull of the black hole. In addition to the gravitational effects on the particles, they will be created with a randomised initial velocity as they are emitted from the particle emitter. This will let the user see where the particle emissions are coming from, in addition to where they are being attracted to. To calculate the particle velocity after each simulation step, we will use the equation below where v0 is the initial velocity at the beginning of the time step, a is the acceleration caused by the gravitational force, and t is the amount of time that has passed in this time step:

$$v = v_0 + at.$$

After the new velocity of the particle has been determined, we can determine the modified position of the particle over the current time step. This is performed as shown in the equation below. With these basic physical interactions clarified, we can continue to the implementation design that will use the GPU to efficiently simulate how these bodies will interact:

$$p = p_0 + vt.$$



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HEARD ABOUT

John Broomhall catches up with Forza 4's car audio specialist

Forza Motorsport 4
Developer: Turn 10
Platform: Xbox 360
www.forzamotorsport.net

Nick Wiswell is the audio specialist for Turn 10's Forza Motorsport 4

PUT TOGETHER *Forza Motorsport 4* and racing car audio specialist Nick Wiswell, and arguably you have a marriage made in game audio heaven. UK game audio's loss was US studio Turn 10's gain as Wiswell and his family upped sticks, moving from Cheshire to Redmond just over one year ago.

With a wealth of experience garnered whilst working on global hits like *Project Gotham Racing*, he nevertheless faced some fresh career challenges. Previously heading an in-house team of sound designers and audio programmers, he was confronted with a fundamentally different *modus operandi* – a small core staff team 'focused on the bigger picture' scaling up with outsourcers and freelancers based on specific project needs and using audio middleware.

"The manifesto for audio was clear: to make the racing sound more exciting, improving the car audio to be more visceral," explains Wiswell. "My predecessors had been looking at the potential for additional dynamic mixing and DSP which fell right into my wheel house; so I took that and ran with it. We didn't want to over-amp things too much and break realism, but we were definitely looking for enhanced excitement."

TRASH TALKING

Wiswell identified two key areas where a different approach could supply big wins: "I developed already ongoing discussions with iZotope about getting their Trash distortion running on FMOD. They gave it a go and made it work. The result is we have Trash running real-time on our car audio.

"Sure, it's a little cut down from the pro-audio plug-in but it's still allowed us to shape the sound significantly and really capture some of that visceral feeling. In real life, these cars are seriously loud, and trying to simulate the awesome volume that kicks you in the guts as they pass by – on tiny half-inch LCD TV speakers – is just never going to happen. However, using something like Trash, we can get an 'on the limit' vibe – the way the sound kind of distorts in your head. It helps give the cars an extra sense of power and speed."

This TV speaker awareness also informs the mixing methodology, with Wiswell always mindful that some 50-to-60 per cent of players will hear the game on limited playback systems - which is why a pair of Avantone 'Mix Cubes' are standard issue for audio staff. Not that those with high-end hi-fi are forgotten.

"We've created bespoke LFE content to create something consistent across all cars – just as for the car engine, we have a bed that's sitting there tracking the game physics, trying to respond and communicate the feel of the car," says Wiswell.

> ***"The manifesto for audio was clear - to make the racing sound more exciting - improving the car audio to be more visceral."***
>
> Nick Wiswell, Turn 10

"The other area of audio we've really focused on is the tyres – such a crucial game-play feedback mechanism. Quite often, though you can't feel it, you can hear the limit. On joining Turn 10, I found out they were getting new tyre physics data direct from Pirelli for use with a new tyre physics model.

"This presented a great opportunity to take the tyre audio up a notch, adding parameters for much more fine grain control. This means you can hear a clearer difference between various types of forces being applied – say, skidding due to locked brakes as opposed to drifting sideways or wheel spin. It's a whole new layer of feedback that's not been in the game before."

ELECTRONIC ART

One of the many benefits of being part of the Microsoft Game Studio's family is a central audio resource storing extensive libraries. Wiswell discovered a tyre recording session on file that had been conducted using a Tesla electric sports car – no petrol engine but power enough to light up the tyres.

"The bespoke library had absolutely everything we needed and we didn't have to spend hours trying to extract the engine audio," he confirms. "So in the new tyre model, we have hundreds of different sounds and skids for each surface type. In fact, it's more complex than the engine model overall because we're tracking lateral and longitudinal forces as well as the amount of load on each tyre – there are different sample sets for loaded/unloaded. As you go into a corner and turn, one tyre's being forced into the ground, while another's being slightly lifted off the surface and the sonic characteristics in each case are completely different."

Apparently, hardcore *Forza* drivers within the studio expressed some hesitancy about changing the tyre sounds until they found they could actually improve their lap times based on the added feedback.

With a smart dynamic mixing system, Kinect support and a collaborative partnership with BBC's *Top Gear* – featuring entertaining VO from Jeremy Clarkson – plus more than 500 vehicles' worth of expertly recorded and implemented car audio that changes as you upgrade and customize your motor, *Forza 4's* audio is all set to impress.

John Broomhall is an independent audio director, consultant and content provider.
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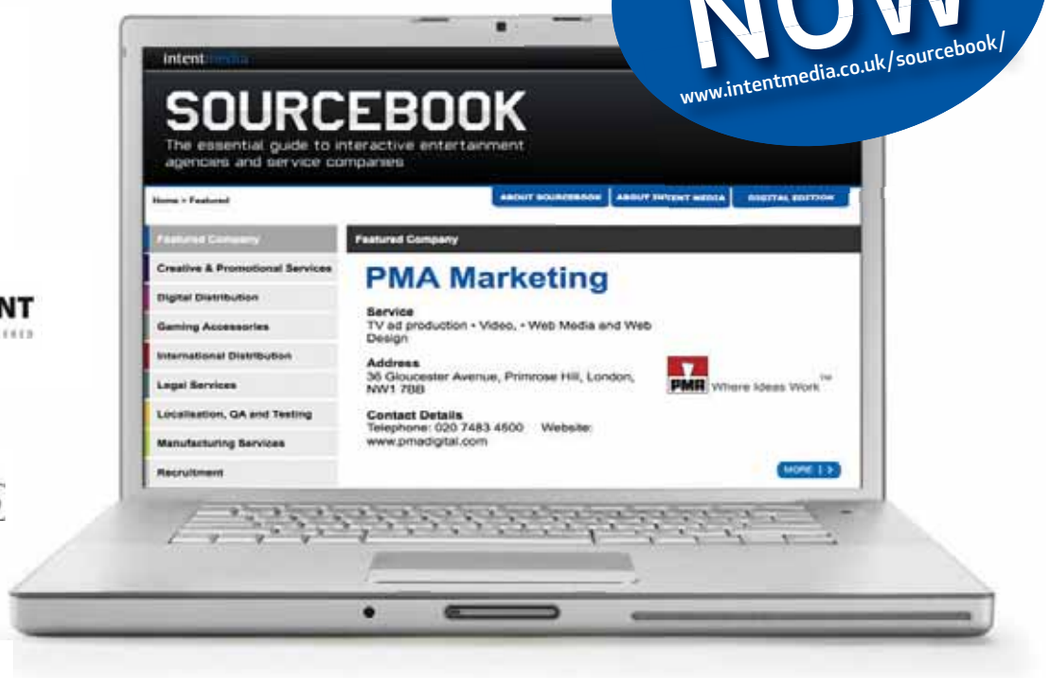

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PERSONNEL

This month: This month: Innogames, Sony, Spellbound and Electronic Arts

Former EA Europe boss **Gerhard Florin**, has emerged as chairman of browser games developer Innogames.

Florin had previously worked as executive vice president at Electronic Arts and was responsible for sales, marketing and distribution across Western Europe.

Innogames plans to explore business opportunities across Europe, UK and US with the help of Florin.

He says he is looking forward to working with the studio and feels the developer has a "strong market position, especially due to its unique browser based games targeted towards high monetisable core gamers."

The studio has worked on online games such as *Tribal Wars* and *The West*.

The former director of the US National Cyber Security Center **Philip Reitinger** has joined Sony to help fortify its PlayStation Network, months after the online service was hacked.

Reitinger joins as chief information security officer, with the appointment coming after the sensitive personal data of more than 100 million PlayStation accounts was compromised in April.

Sony was forced to close down its network for nearly a month, and offered free games to customers in a comprehensive compensation initiative.

"Certainly the network issue was a catalyst for Reitinger's appointment," a Sony spokesman told Reuters.

"We are looking to bolster our network security even further."

The founder of Exozet Games, **Bartol Ruzic**, has resigned from his position at the developer to join German studio Spellbound Entertainment.

Ruzic will be leading the developer's activities within the range of browser, mobile and serious games.

At Exozet, the German studio which he co-founded in 1996, he held the role of Chief Operational Officer and has previously worked as a producer and project manager for other European based studios.

"With Bartol Ruzic we welcome an experienced online and mobile games manager at Spellbound Entertainment AG. We look forward to expanding our business with him," said Spellbound CEO Andreas Speer.

Decorated venture capitalist **Jay Hoag** has joined Electronic Arts' board of directors, the company has announced.

Hoag, a technology investor who sits on the boards of eHarmony, TechTarget, Zillow and Netflix, has become the eleventh member of EA's board.

"Jay Hoag is an extraordinarily valuable addition to EA," said the publishing giant's CEO John Riccitiello.

"His early investments in Expedia, Netflix and other technology leaders demonstrate his unique insight into mass-market consumer technologies. We look forward to his leadership and vision."

Hoag said he has followed EA closely and is looking forward to working with the firm "to expand its global leadership in this market".

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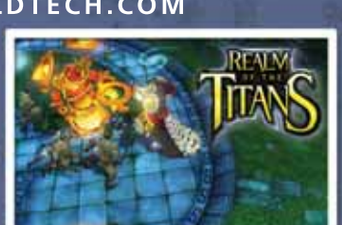

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STUDIO SPOTLIGHT

This month: This month: Escapist Games

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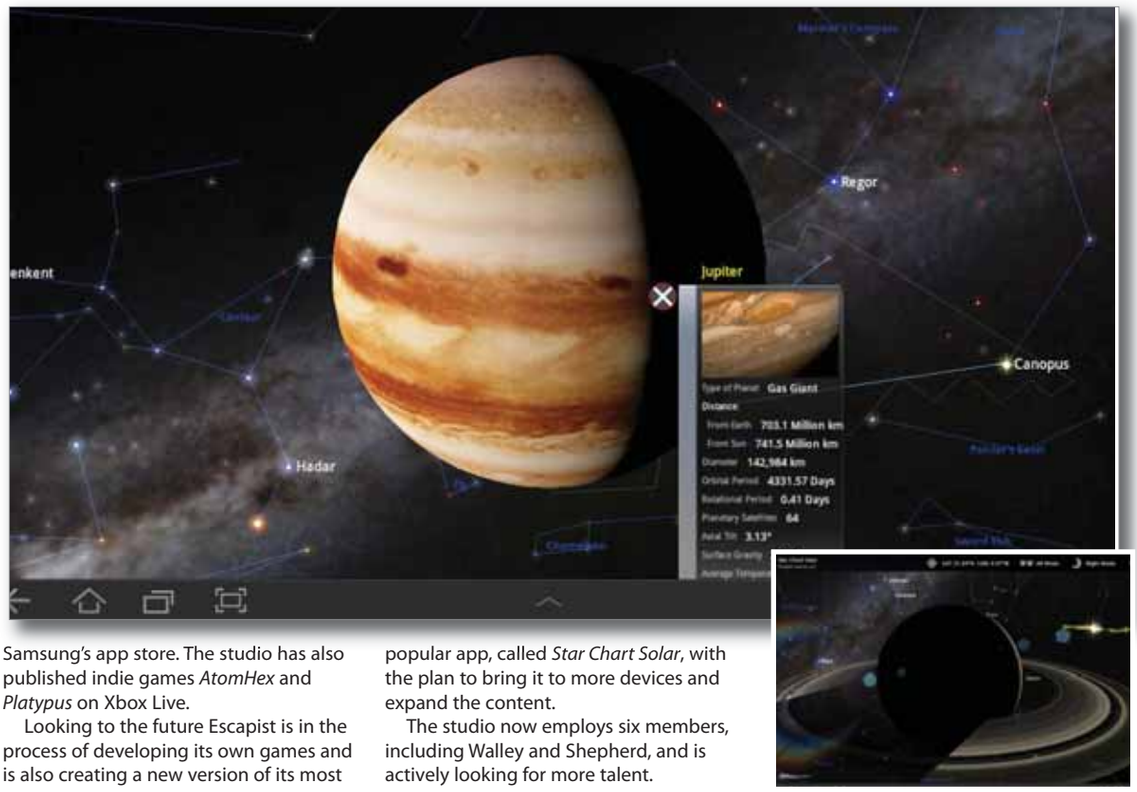
Escapist Games was founded just two years ago after ex-EA veterans, former senior producer San Shepherd and Criterion previs lead artist Chris Walley, left the publishing giant following completion of *Burnout Paradise*.

Looking to break into the digital scene with their own studio, Shepherd says they set out to focus on developing innovative software and arcade action games, taking cues from their previous EA titles.

The two founders also wanted to control their own content and have a direct relationship with their consumers as they began their move into digital distribution.

"We quickly found out that the app store was where a developer of talent could make a mark, whereas XBLI, however much we wanted it to, just couldn't support professional development," said Shepherd.

The studio's first release wasn't a game, but an augmented reality app called *Star Chart*, which has now been installed on over one million devices around the world. Shepherd is keen to highlight that it is now considered one of the top AR apps in the world and has been featured on both Apple and Google whilst appearing with an exclusive version on Samsung's app store. The studio has also published indie games *AtomHex* and *Platypus* on Xbox Live.



Looking to the future Escapist is in the process of developing its own games and is also creating a new version of its most popular app, called *Star Chart Solar*, with the plan to bring it to more devices and expand the content.

The studio now employs six members, including Walley and Shepherd, and is actively looking for more talent.

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TOOLS NEWS

This month: Intel, Unity, Crytek, Epic

The **Intel** graphics performance analysis tool, used to help optimise games, media and other graphic-intensive applications, is now available at no charge exclusively to members of the free to join Intel software partner program.

The developer tool suite allows users to analyse CPU and GPU workloads enabled by web browsers such as Chrome, Explorer and Firefox. It also provides media analysis tools to visualise code efficiency with Intel Media and OpenCL SDK's whilst adding a hardware thread-view in the graphics performance analysis platform analyser.

The new GPA media performance analyser also allows the ability to create media performance trace capture files for visualisation and detailed analysis and can provide capture trace files for a system-wide picture of how your code works with Intel media SDK and Microsoft DXVA2 and how media-related workloads execute on the GPU.

Unity Technologies has opened a new subsidiary in Tokyo, Japan, the company has announced.

The engine vendor said it would use its new Tokyo office to serve as a sales, localisation and support centre.

"The establishment of the Unity Technologies Japan office and the addition to our company of such a knowledgeable, passionate team further cement Unity Technologies' commitment to democratise games development globally," said Unity Technologies CEO David Helgason.

"We are looking forward to offering the Japanese development community local support."

The management team of Unity Technologies Japan will be led by representative director/chairman Shinobu Toyoda, formerly VP of Sega, director/president John Goodale, who previously worked at Activision and regional director Hiroki Omae.

The free-to-use CryEngine 3 SDK has been downloaded more than 300,000 times in just three weeks since its release in August, according to company data.

Crytek's powerful engine had already passed 100,000 installs in less than a week since it came out.

"It's great news for us, and it seems like global coverage, not just Europe-heavy," Crytek co-founder Avni Yerli told Develop. "It's being picked up equally across the US, Europe and Asia."

Before it was released for free, studios needed to pay for a licence agreement to use Crytek's flagship engine. The CryEngine 3 SDK relaxes those restraints by allowing anyone with a PC to download it for free. A licence deal is only arranged if the user decides to build a commercial PC project.

Yerli also told Develop the studio is preparing to evolve its business beyond traditional games development details of which he said he can't yet disclose.

The free edition of Unreal Engine 3 has had more than 900,000 unique installs since its release in November 2009, according to vendor **Epic Games**.

The studio added that the figure has been drawn from unique installs and if it counted the gross number of downloads the figure would be higher.

The UDK is Epic's own alternative to Unreal Engine 3 that is completely free to download and operate, and has proven popular among indies and enthusiasts.

If a user wants to produce a commercial game a one-off $99 fee is charged and Epic has said it will take a 25 per cent share of subsequent revenues after a UDK game's first $50,000 in sales, which it will not take any royalties from.

However, Epic only calculates its 25 per cent after separate charges are incurred from a game's digital distributor – such as Apple and Google which each take 30 per cent from games hosted on their mobile platforms.

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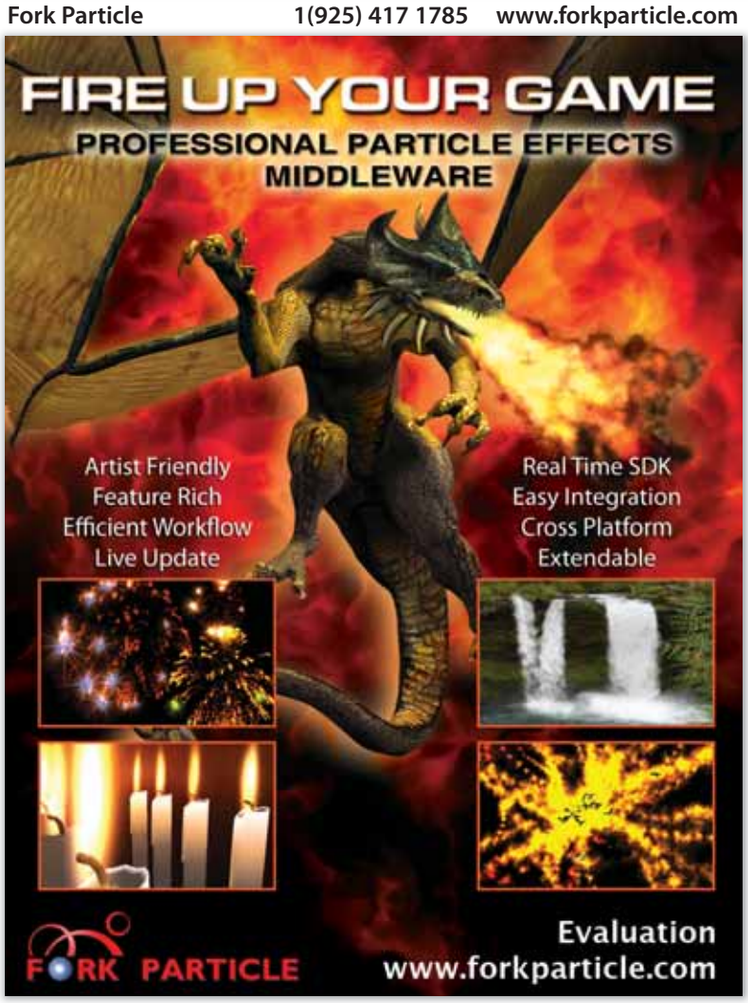

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SERVICES SPOTLIGHT

This month: U-Trax

U-TRAX is a company that delivers localisation, testing and advertising services to the video game industry.

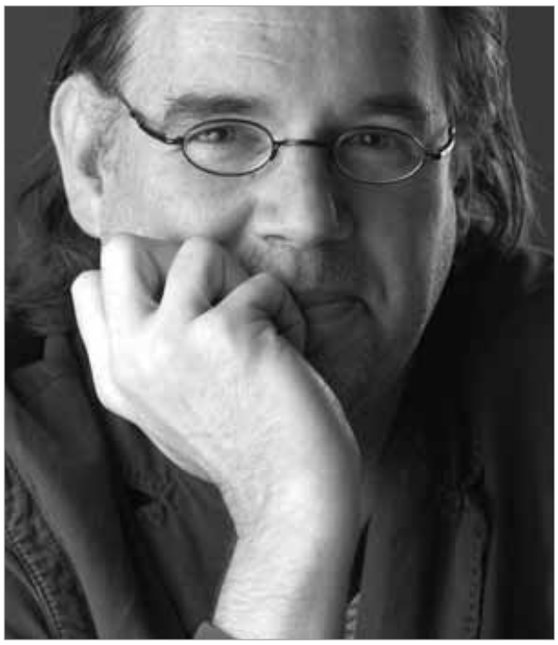
Based in Utrecht, it was founded in 1992 as a record label, but since 1997 it has been providing services to the industry and they have worked on over 2,000 titles, including *Plants vs. Zombies* and *Assassins Creed II*.

U-TRAX provides its translations in 'most major European languages' as well as others such as Japanese, whilst also offering voice recordings and linguistic tests on localised games for its clients.

Its advertising services, which in 2005 became an independent company, has designed and produced TV and cinema ads, company logos, brochures and trade show booths to various industry studios.

In September the company appointed former Take Two/2K Games localisation director Scott Morrow to its own localisation project management team. Following this and other appointments founder Richard Van Der Giessen said the service is keen on having a team of "service minded, client-focused linguists that understand the predicaments our clients are in and work closely together with them."

For the future U-TRAX says it is focusing on "broadening its global footprint" by expanding to new offices, new languages and "innovating" its services such as MESS (Music, Effects, Sounds and Services) in an industry that "changes ever day."



As for how they are adapting to industry changes, Van Der Giessen said "U-TRAX keeps making its organisation leaner and meaner and is constantly improving and strengthening its processes, so we can at one hand deliver exactly the service clients want and at the other hand can quickly react to new business opportunities. And we keep seeing these pop up constantly and all over the world."

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SERVICES SPOTLIGHT

This month: Image Metrics

image metrics

Image Metrics is a facial animation company that has provided solutions for clients such as Activision-Blizzard, Rockstar, Microsoft, Bethesda and Elecetronic Arts.

Founded in the United Kingdom in 2000 by Ph.D's in computer vision, the firm decided to focus on facial animation after determining that it "offered the most challenging test for its technology."

Image Metrics then began to apply its technology to the games market on Sony's *The Getaway* in 2002 before providing Rockstar with the same services as early as *Manhunt* in 2003. In 2006 the service provider had expanded its successful business by opening a new headquarters in Santa Monica, California.

The company has recently partnered with Motion Technologies to expand its technology and products to the Asia Pacific market. Motion will be the first company to resell and distribute the Faceware facial animation software and headcam hardware.

General manager of professional products at Image Metrics, Peter Busch, says the firm's services are adaptable to changes in the industry, such as the rise of indie start-ups.

"Because we can now certify service providers in cost-friendly environments like the Phillippines, China and India, Image Metrics technology is available to any entity looking to produce high-end animation results without the worries of staggering costs or losing creative control of their respective projects."

As for the future, Busch believes the company is "well established" and "respected" for providing facial animation solutions to the entertainment industry either through its Faceware software or its certified partner program.

He also says the company has taken "major steps" into the consumer animation space having recently launched 'PortableYou' which allows end-users to create their own personalised 3D avatars using facial photos.

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TRAINING NEWS

This month: Unreal dev kit to power 48-hour game jam

A 48-hour video game creation marathon, using Epic Games' Unreal Development Kit, will take place from the 4th to the 6th of November at the University of Bedfordshire.

The Game Jam, in association with training provider Train2Game, will have registered competitors put into teams of six to ten going head-to-head to create video games around a 'secret theme', which will be announced on the first evening of the event.

It is open to existing Train2Game students and amateur developers aged over 17, but industry professionals are excluded from entering.

The prizes, which will be announced closer to the event, will be available for the three teams that make the most innovative new games developed over the weekend.

"The Train2Game and Epic Game Jam is a great opportunity for students and amateur games developers to create content for their portfolio and rub shoulders with well known developers within the industry," said Train2Game marketing director Mike Head.

"Working with Epic Games also means that we have a unique opportunity to introduce participants to the cutting-edge UDK framework, which will allow them to really bring their games to life and showcase their talents."

Mike Gamble, European territory manager of Epic Games added:

"Participants will have access to excellent tools, members of the Unreal Engine development community and industry veterans, plus there's potential for the best games to gain additional exposure beyond the event itself."

No pre-arranged teams or development groups will be allowed so those attending will have to work with new people.

Computers will be provided by the University which has offered lab space to make room for everyone attending.

The hosts have also said that the systems available are 'more than capable of running all the latest softare required for modern games development'.

Personal computers can be brought, and space will be made available for those that do, but they will need to be PAT tested (safety checked) before they are allowed and notification must be given when registering.

As the event is over 48 hours, room has been made for sleeping but sleeping bags and quilts must be brought in as these are not provided.

Existing Train2Game students are able to register for the competition free of charge, with a £35 fee applicable to non Train2Game students.

All profits from the contest will be donated to the Prince's Trust Charity that helps the development and improvement of young people, and provides opportunities for them to develop to their full capacity.

At the end of the event, the games created are made available for free download on the internet.

To register go to: **http://train2game-jam2.com/**

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THE UNIVERSITY OF HULL

THE DEVELOP QUIZ

LAST MONTH teams from across the UK flocked to the latest Develop Quiz, all equally keen to prove the intellectual clout of their staff.

At the end of the night Peppermint P emerged victorious, taking home the coveted first prize.

Hot on the PR outfit's heels were second placed London indie Curve, just one point behind. In third place came cross-platform mobile tech company Marmalade.

Peppermint P took home the treasured Develop Quiz trophy, £2,000 worth of studio time with Wave, a £2,000 Develop ad credit and lots of champagne.

Meanwhile Curve secured themselves a cherished lunch and interview with the *Develop* team, a big box of luxury cupcakes courtesy of Wave Studios, and their own stash of champagne. Marmalade, meanwhile, made away with champagne and luxury cupcakes, again on behalf of Wave Studios.

Our generous joint sponsors Wave Studios and Avatar Games Recruitment ensured the night was a huge success, and a fine time was had by all.

In order of score, starting with the highest, the following teams did battle at the second 2011 Develop Quiz:

1. WINNERS: Peppermint P	**62 points**
2. Curve Studios	61 points
3. Marmalade	57 points
4. Total War Team (The Creative Assembly)	56 points
5. Bossa Studios	56 points
6. Spilt Milk Studios	54 points
7. The Chestbursters (The Creative Assembly	54 points
8. Media Molecule	51 points
9. Datascope	51 points
10. Jagex 1	51 points
11. Splash Damage	49 points
12. Jagex 2	48 points
13. Wave Studios	45 points
14. Future Games of London	45 points
15. Universally Speaking	41 points
16. Rocksteady	39 points
17. Big Head Games	35 points

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13. WAVE STUDIOS

1. PEPPERMINT P

2. CURVE STUDIOS

5. BOSSA STUDIOS

6. SPILT MILK STUDIOS

9. DATASCOPE

10. JAGEX 1

14. FUTURE GAMES OF LONDON

15. UNIVERSALLY SPEAKING

3. MARMALADE

4. TOTAL WAR TEAM

7. THE CHESTBURSTERS

8. MEDIA MOLECULE

11. SPLASH DAMAGE

12. JAGEX 2

16. ROCKSTEADY

17. BIG HEAD GAMES

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With Develop 100 insertion

Audio Special
A detailed summary of music and audio for the games sector, from in-house teams through to outsourcers

Events:
Develop Quiz – Date TBC

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We Know Your World

THE FAQ PAGE: HIDETAKA 'SWERY' SUEHIRO

Develop grills respected figures from the global development sector

Deadly Premonition creator Swery, who joined the games industry as a tester at arcade outfit SNK

Who are you and what do you do?
My name is Swery, and what I do is I make video games that other people can't.

What are you working on right now?
There is a game that will be announced soon in Japan that I'm currnetly working on, and I am also working on a new video game project concept.

That will be a completely new, very different game.

And then I am also working on a few different *Deadly Premonition*-related projects. I think people do see *Deadly Premonition* as a cult game.

When I was making the game I was trying to make something really fun and really cool, but at the same time I wasn't sure that it would be for everybody.

In that way, maybe I was right and it wasn't for everybody.

What was the first video game or product that you ever worked on in the industry?
My first job was at SNK where I was working as a tester on a game called *Ryuuko no Ken* Japan, which is known in other parts of the world as *Art of Fighting*.

What was the first video game that you ever played?
For me it was a long time ago, and it was *Space Invaders*.

What was the most recent video game that you played, and did you enjoy it?
The last game I played was *From Dust*, and it was awesome.

What is your favourite game ever, and for what reason?
It was the Super Famicom *Zelda*. Looking back at that now, it is kind of like a textbook for making a really good video game.

How many hours a week do you get to spend playing games?
It's two hours every night before I sleep.

> ***"I'm not sure of the worldwide market, but speaking with regard to the Japanese market, the video games that become hits seem to be limited to just a handful of genres."***

What area of the industry needs more investment?
Cult games, of course.

What disappoints you about the video games industry today?
I'm not sure of the worldwide market, but speaking solely with regard to the Japanese market, the video games that become hits seem to be limited to just a handful of genres.

Of all the games you have worked on, which has been your favourite?
It is *Deadly Premonition*, because I have poured the most heart into the characters.

What do you enjoy most about working in the games industry?
For me it is the user feedback from the people that play my games.

What hobbies, collections or interests do you have that are completely unrelated to video games?
I like to dine, and I like to eat a lot. I really enjoy movies and watching TV dramas, and I like listening to music. I also like going fishing and drinking liquor. Of course, I like girls, and I like driving and traveling.

What is your favourite book, movie, TV show and album of all time?
The movie one is going to take a long time to answer. I'm not sure of the English title, but for the book I'd say a Japanese book by Hugashino Kago called *Yōgisha X no Kenshin*.

For the movies I have to choose several. I would say *Brazil*, *Pulp Fiction* and *Inception*. The TV drama would be *Full House*, *V*, *Twin Peaks*, and *Ghost*.

And the album? I think I would choose *Mother's Milk* by Red Hot Chilli Peppers.

What game that you were not involved with would you most liked to have worked on?
The first *Silent Hill*.

What other video games developer do you most admire?
It would be foreign developers like Valve and Epic games. Those are the developers I really do respect.

Swery's cult creation Deadly Premonition

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THE INTERNATIONAL MONTHLY FOR GAMES PROGRAMMERS, ARTISTS, MUSICIANS AND PRODUCERS

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Develop Magazine. Saxon House, 6a St. Andrew Street. Hertford, Hertfordshire. SG14 1JA
ISSN: 1365-7240 Copyright 2011 Printed by The Manson Group, AL3 6PZ

Subscription UK: £35 Europe: £50 Rest of World: £70
Enquiries, please email: dev.subscriptions@c-cms.com Tel: 01580 883 848

Charges cover 11 issues and 1st class postage or airmail dispatch for overseas subscribers

Develop is published 11 times a year, reaching 8,000 readers throughout the UK and international market

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